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DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

ON

H.R. 4475, 5394 and S. 2720

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2001, AND FOR OTHER PURPOSES

Department of Transportation
National Railroad Passenger Corporation (Amtrak)
Nondepartmental witnesses
Surface Transportation Board

Printed for the use of the Committee on Appropriations

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DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2000

TUESDAY, DECEMBER 14, 1999

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met, at 2 p.m., in the Z.J. Loussac Library, Assembly Chamber, Anchorage, AL, Hon. Ted Stevens presiding.

Present: Senator Stevens.

Also present: Representative Don Young.

OVERSIGHT HEARING ON ALASKA AVIATION ISSUES FOR THE 21ST CENTURY

FEDERAL AVIATION ADMINISTRATION

STATEMENT OF PATRICK N. POE, REGIONAL ADMINISTRATOR, ALASKA REGION

NONDEPARTMENTAL WITNESSES

STATEMENT OF:

PAUL BOWERS, ALASKA DEPARTMENT OF TRANSPORTATION, DIRECTOR, STATEWIDE AVIATION
MORTON V. PLUMB, JR., DIRECTOR, ANCHORAGE INTERNATIONAL AIRPORT
JAMES D. LABELLE, CHIEF, ALASKA OFFICE, NATIONAL TRANSPORTATION SAFETY BOARD
RICHARD HARDING, PRESIDENT, PENINSULA AIRWAYS
TOM WARDLEIGH, PRESIDENT, ALASKA AVIATION SAFETY FOUNDATION
FELIX MAGUIRE, PRESIDENT, ALASKA AIRMEN'S ASSOCIATION
KEN ACTON, AVIATION CONSULTANT

OPENING STATEMENT OF SENATOR TED STEVENS

Senator STEVENS. Thank you, Congressman Young, for joining us. I know that you have a great interest in aviation also. I am sort of singing to the choir, but we all know that no other State is more dependent on aviation than Alaska is, with 70 percent of our communities accessible only by air. Alaskans count on aircraft to deliver supplies, food and medicine. They are crucial to evacuation of the ill and injured.

And I think the people that live in the Lower 48 have a hard time grasping the concept that we use aircraft as they use almost

every other form of transportation—cars, buses, and trucks. Aircraft cover the whole spectrum of transportation.

And I am pleased to see you here, Tom. This summer, Tom Wardleigh took me back 50 years and helped me renew my pilot's license and helped me get a float plane license, so it is good to see you here, my friend. As president of the Alaska Aviation Safety Foundation, I know you are deeply committed to the goals that we are trying to pursue here.

I chair the Senate Appropriations Committee, and I am also on the Aviation Subcommittee of the Senate Commerce Committee. Very soon, my good friend and colleague here, Congressman Don Young, will chair the House Transportation and Infrastructure Committee. This will give us, I think, the first time in history where we have such a complete coverage of all of the facets of the legislative process of our national government that affect aviation. The two of us, like all of you, are deeply committed to improving aviation safety in Alaska.

PREPARED STATEMENT

I have a longer opening statement, incidentally, to print in the record, but that is my opening statement for today. I want to thank all of you for coming and give Congressman Young a chance to make an opening statement if he wishes to make one.

[The statement follows:]

PREPARED STATEMENT OF SENATOR TED STEVENS

Good afternoon everyone. I'm pleased to see such a fine panel representing Alaska aviation today. As you know, we're here to discuss aviation issues facing us in the new millennium. Your complete prepared statements will be made part of the record, each of you will get five minutes to summarize your statements, and then we should have some time left over for questions.

Let me begin by stating the obvious: There is not another state in the Union more dependent on aviation for its way of life than Alaska. Let me repeat that—There is no other state in the Union more dependent on aviation than Alaska.

More than 70 percent of our 300 plus communities are accessible only by air. Alaskans in those communities count on aircraft to deliver mail, supplies, food, and medicine. When someone in a remote village becomes too ill to be treated locally, evacuation by air becomes a matter of life or death. People who live in the lower 48 have a hard time grasping that concept. They don't understand that we use small airplanes like they use buses and taxis. They have highways—we use skyways. Alaska has the highest per capita aircraft ownership in the country. In relation to its population, Alaska has more flights, by far, than any other state. Frank, Don and I spend a lot of time trying to convince our colleagues that Alaska requires special consideration when it comes to aviation legislation and funding. We've been fairly successful in that endeavor—but we cannot afford to stop educating others on the special reliance Alaska has on aviation.

Flying is an inherently dangerous occupation made relatively safe through technology innovations, the world's best air traffic control system and, most important, well-trained, experienced pilots. For safe air transport, we need excellence in all three areas—the machine, the pilot, and ground support.

We need to redouble our efforts to procure and deploy safety enhancing equipment and weather reporting capabilities. We have some of the roughest terrain and weather in North America. The vast majority of our low altitude airspace is not radar monitored. Most of our intrastate air traffic takes place below 10,000 feet. And the planes we fly are, on average, older than most planes flown in the lower 48. Does this mean we cannot improve aviation safety in Alaska? The answer is, "No." We can—and must—continue to improve aviation safety. Every one of us participating in this hearing today can make a positive impact on aviation safety.

That is why we're here today—to talk about where we want to be ten, twenty,, or even a hundred years from now. All of you work in the aviation community every day. Some of you, like me, are licensed pilots—so your commitment to improving

how we fly in Alaska is personal. I see my good friend Tom Wardleigh at the witness table. He helped me get my float plane license last summer. As president of the Alaskan Aviation Safety Foundation, Tom is deeply committed to improving aviation safety.

I chair the Senate Appropriations Committee and sit on the Aviation Subcommittee of the Senate Commerce Committee. Soon, Congressman Young will chair the House Transportation and Infrastructure Committee. Senator Murkowski chairs Energy and Natural Resources. All of us are deeply committed to improving aviation safety in Alaska. Most states have a heck of a lot more than three legislators fighting for their interests. But I'll tell you, when Frank, Don and I get together—the "three amigos" can more than hold our own in pursuing Alaska's interests.

We can fight the broad aviation policy battles in Washington—making sure our government recognizes and honors Alaska's unique aviation needs. We can also work to maximize federal funding for Alaska aviation. But nothing we do can really make a difference without the mutual cooperation and commitment of the people in this room and throughout the aviation community in Alaska.

Safety improvements are not borne of increased regulation. Some people in this room, maybe on this panel, may not agree with me on this. But I know, personally, that Alaska has some of the finest pilots in the world. Our job is to provide the best possible environment for them to practice their essential profession.

I hope our discussion here today is a step toward improving that environment and the air transportation system that is so critical to Alaska's future.

STATEMENT OF HON. DON YOUNG

Mr. YOUNG. Thank you, Senator, and I have a written statement that will be submitted for the record, without objection. My interest, as the Senator has mentioned before, is the safety factor, but also the capability of our Alaskans to travel without a great deal of hindrance, to arrive at their destinations on time, and to make sure that we will be able to improve the capability of the FAA and the runways, the lighting system, navigation systems, and to make it safe and practical for every Alaskan that participates in air transportation.

It is my vision that we will improve these airports, that we will be able to solve many of these problems in the future. I will say that there are many different feelings about this issue. Everyone seeks safety. I know that, and there are some who believe that we are doing everything possible.

The air transportation industry, which employs over 10,000 people in this State, is one of the largest employers in the State of Alaska. We want to allow the aviation industry, to continue growing and improving service without any undue hardships, and yet do it safely. It is going to be my goal to see that this will be achieved.

PREPARED STATEMENT

Thank you, Senator, for having this hearing. I think it will be important. We have two panels, I believe, and we will hear from the expertise in that field, and with that I am ready to do business.

[The statement follows:]

PREPARED STATEMENT OF CONGRESSMAN DON YOUNG

Chairman Stevens—thank you for the opportunity to participate in this hearing. I'll keep my remarks brief.

Every Alaskan knows aviation plays a major role in Alaska. Without a major road system only 100 of Alaska's 300 communities can be served by road. With over 1,100 airstrips and airports and more than 9,700 registered aircraft and 10,605 pilots, it is easy to understand how vital aviation is to Alaska. Further, because of Alaska's

distinct geographic location between Europe and Asia, Anchorage International Airport lands more freight than any other airport in the nation. Fairbanks International is also becoming a player in the cargo arena. It is also a well recognized fact that Alaska's air transport industry provides over 10,000 aviation related jobs.

The average Alaskan flies nine times a year, compared to the average American, who flies twice a year. This brings me to an issue I have a great interest in—— aviation safety. According to the General Accounting Office, the number of people using the airways will grow to over a billion by 2002. With that many people in the air, it is crucial that we continue to modernize our air traffic control systems. In Alaska that means making the investment at small, rural airports with the installation of runway lighting, runway lengthening and paving, accurate weather reporting and modern communications systems.

Nationally, the U.S. Air Traffic Control System remains one of the top systems in the world. Unfortunately, the FAA's current modernization program has experienced cost overruns and schedule slippages which have caused delays with implementation. Congress will address this and other issues when it returns next year.

Although there are other equally important issues, I want to conclude my statement with the subject of funding. The resources to upgrade safety and make airport improvements exists.

How much is actually needed and how to spend taxpayers money are issues that Congress will need to resolve next year. It is my position that all Americans deserve safe and affordable air travel, and that taxpayers are provided with a healthy return on their investment.

Thank you Senator Stevens for the opportunity to speak on these important issues and I look forward to hearing the testimony of the witnesses.

Senator STEVENS. Thank you very much. My staff has prepared a short handout for all of you. I do not know if you have got a copy of it, but I want to point out the statement that is in there that last month I met with Linda Rosenstock, who is Director of the National Institute of Safety and Health, and the Director of the Alaska Office, George Conway, to discuss ways to enhance aviation safety in Alaska.

Linda has agreed to focus on recommendations of Jim Hall from the National Transportation Safety Board. He came here last August to help us find ways to improve aviation safety, and he brought back a series of recommendations, including a proposal for an industry-guided initiative to reduce accidents and fatalities, focusing on voluntary compliance.

Congress has agreed to my request to make additional resources available to Dr. Rosenstock, as well as the FAA and NTSB, to further the study, so we look forward to the witnesses today telling us what they think about that study, and what we ought to do to concentrate our total efforts on aviation safety.

[The information follows:]

ALASKA'S AVIATORS

As a lifelong pilot, safety has always been number one on my flight checklist, both in the cockpit and in the Congress. In August, Jim Hall, Chairman of the National Transportation Safety Board, came to Alaska to find ways to improve aviation safety in Alaska. He came back to Washington with recommendations including a proposal for an industry-guided initiative to reduce accidents and fatalities focusing on voluntary compliance rather than new government regulations.

Below is a short summary of some of the safety initiatives Congress funded this year along with other projects of interest to the aviation industry in our state.

If you have questions about any of these provisions, you may call my chief of staff, Mitch Rose, at 202–224–3004 or any of my Alaska offices located in Anchorage, Fairbanks, Ketchikan, Wasilla, and Kenai. My Washington office is open until 7:00 p.m. Eastern Standard Time (3:00 p.m. Alaska Standard Time) for your convenience.

AVIATION SAFETY INITIATIVE

Last month I met with Linda Rosenstock, Director of the National Institute of Occupational Safety and Health and the director of the Alaska office, George Conway, to discuss ways to enhance aviation safety in Alaska.

She agreed to focus on the recommendations of Jim Hall and to pursue a voluntary effort with Alaska's air carriers, pilots, and taxi services. A similar approach has dramatically reduced accidents in the fishing and logging industries and has all but eliminated occupational fatalities in what were the two most dangerous occupations in the nation. Congress agreed to my request to make additional resources available to Dr. Rosenstock as well as to the FAA and the NTSB.

MIKE-IN-HAND

Many remote village airports have no automated weather reporting equipment or FAA weather personnel. As a result, pilots must rely on dated weather forecasts rather than real-time field observations.

Under a new federal program called "Mike-in-hand," any airport with regular, part time, or contract employees will be able to report weather conditions directly to inbound pilots via VHF radio. At my request, sufficient funds were provided to acquire the necessary equipment, train personnel, and initiate the program.

MOUNTAIN PASS CAMERAS

At last year's mini-conference, a number of pilots indicated that remote video cameras were a valuable flight tool.

Through a new NTSB-recommended initiative, cameras will now be placed in dangerous mountain passes where weather conditions change rapidly. The cameras will provide real-time color weather pictures to pilots who can make the decision on whether to fly through a pass without having to go in to take a look. This will reduce the risks that pilots face.

ST. GEORGE INSTRUMENT LANDING

No longer will pilots be locked out of St. George Island for weeks at a time because weather is below NDB minimums. By the end of next year, the FAA will finally have an ILS in place at St. George. Congress agreed to fund the plan this year.

AUTOMATED SURFACE OBSERVING SYSTEM

Funding was provided to continue this project.

JUNEAU WEATHER RESEARCH

Additional funding was made available at my request to continue weather research on turbulence and wind shear at Juneau International Airport. This project is a continuation of a multi-year effort initiated in response to several weather related mishaps in Juneau.

ALASKA CAPSTONE

This program, which will install state of the art cockpit upgrades for participating aircraft, along with airport, communication and GPS modernization throughout the Bethel region, is the test bed for the entire nation. When fully operational, CAPSTONE will be an integrated, nonradar, low-altitude, IFIR airspace designed to bring Alaska's airports into the 21st century.

ALASKAN NAS INTERFACILITY COMMUNICATIONS SYSTEM (ANICS)

Congress fully funded this project which integrates interagency communications throughout Alaska.

Senator STEVENS. Our first panel this morning—this afternoon. You know—if it's Tuesday it's Anchorage, right—is Pat Poe, Director of the Alaska Region, Paul Bowers, the Director of Statewide Aviation for the Alaska Department of Transportation, Mort Plumb, Director of Anchorage International Airport, and Jim LaBelle of the National Transportation Safety Board. Gentlemen, you are at your liberty to see who goes first. Do you want to toss

a coin, or proceed in the order I read them? It is all right with me, whatever you want to do.

Thank you for taking the time to be with us. We are, incidentally, going to take this record back. This is an official hearing, and it will be reported to the Appropriations Committee and be part of our consideration of the legislative package for aviation early next year.

So Pat, do you want to go first?

STATEMENT OF PAT POE

Mr. POE. Yes, sir. Thank you, Senator, Congressman, ladies and gentlemen.

At the outset, let me respond, Senator, to your question about my reaction and the FAA reaction to the proposed collective effort of NIOSH, the NTSB and the National Weather Service. I think that study in the background upon which it is based is absolutely excellent. We are eager and more than ready to participate. We have done two other studies earlier, that lend some relationship and support to that, and I think this will be an excellent building block.

If I might just a moment, I was told the light was going to be on. It would give me an indication of when I should talk, and there is no light, so I am not sure if I am ahead of my time.

Senator STEVENS. Well, I decided that you all have been asked to talk about 5 minutes, but I was not going to ring the bell on you, so we turned off the light. Let me make a correction on this handout of ours. It is George Conway, not George Newman, and I apologize for that.

But we do hope you will keep it about 5 minutes, but I do not think the time we have that the people are here to listen to it. We want to hear your views about what we can do to assist you to improve aviation safety. That is really our target today.

Mr. POE. Great. Thank you, Senator. Well, let me say this, that in the few minutes that I have I am going to focus on some of the new initiatives, the things that are being done in Alaska. As I think all of you know, we have had a consistently high accident rate, and if we expect something different, I think we have to do something different.

CAPSTONE PROJECT

I want to point out that the items which I will cover are really a product of two things, one, cooperation with our industry, and second the direct support that we enjoy and get from our congressional delegation. The first of the items is the Capstone project, which concentrates in the Yukon-Kuskokwim Delta in the Bethel area, a radius of 200 miles, and we are equipping at Government expense a total of 150 aircraft.

Those aircraft will have, within their cockpits, for the pilot, information as to the moving map of the terrain. It will change colors if the pilot does not have the altitude to clear the obstacle. It will also show the targeting, the position of other similarly equipped aircraft, and in phase 2 of Capstone it is possible to uplink radar images so that you will see all aircraft, not just those that are Capstone-equipped.

It also will uplink weather information. As the aircraft moves, it will downlink its position and potentially in the future be an aid to air traffic control. We have done Indian testing. It takes the generated downlink and through satellite brought it into the Anchorage Center, and it appears on the screen just as though it were a radar-generated target. In the event that there is a mishap, the ability to immediately initiate a very successful and timely search and rescue is made possible by the ground tracking capability associated with this technology.

The University of Alaska here at Anchorage, under contract to the FAA, is doing the training. The first beta training class was conducted the week of December 7. They will also do an evaluation covering 3 years, totally independently of the FAA to determine the beneficial impact of the Capstone project.

If I might say, I think we've come a long way in the 1 year since we first got the appropriation, and it is a project that has been made possible by the very close support of the industry.

WEATHER CAMERAS

I want to talk briefly, too, as to the Alaska weather cameras. I notice this is covered in some of the other information. We have cameras up and operational, four of which belong to the University of Alaska Fairbanks. It was a part of the doctoral program effort. They have asked that we take those cameras, and the reality of the situation, why we are studying it, certainly we will.

With the $1.7 million that has been appropriated this year, it is feasible by the end of this coming calendar year we will have 25 of these cameras operational. They give you the ability to go on the Internet and see a clear day picture and a current day picture and give the pilot the added information as to whether this is the right time to fly, or perhaps not. It also has an archiving capability, so we can look to see if the weather is worsening or getting better.

The bottom line for all of that is, it is intended to help the pilot make the best possible decision. The user community has identified a total of 50 sites at which they would like to have weather cameras.

Another program in which I personally am more than enthusiastic about, for which the FAA cannot take any credit, is the training of the Alaska Native community to be the future commercial pilots for the State of Alaska. Yute Air, Will Johnson, head division, worked with the Association of Villager Council Presidents, and the Kuskokwim Tribal College at the University of Alaska here at Anchorage.

Students from 14 villages are going through training. Seven of them have their private pilots licenses, and they are now going on to their commercial licenses. There is a grant from the State that is going to continue that program. The FAA presented an award to the president of the Association of Village Council Presidents for that initiative.

ALASKA AIRPORTS

In terms of airports, we have a good story there, and it is a good story that belongs collectively to all of the airport sponsors as well as the FAA Airport Division. If you go back to about 1990, the AIP

grants were about $50 million. For the past 2 years it exceeded $80 million. During this decade, $3 to $4 billion have gone toward improvement, and working with the community, the Airports Division has developed a regional airport plan.

I do not want to leave without acknowledging the ongoing infrastructure effort. A great many of the people of the FAA in the State of Alaska worked daily to keep the current systems as active and robust and growing as is possible. An example of that might be that every year we initiate about 120 new projects. In 1997, we have 40 weather-reporting sensor stations. Today, we have 87, more than doubled.

With 17 days left until the year 2000, I am pleased to report that in June the FAA was judged to be Y2K-compliant. I want to acknowledge the close relationship we have enjoyed with the State, and also with the DOT, which has declared the airports under its control Y2K-compliant. Certainly we are going to have a lot of people working over New Year's, and I will be one of them, just to be there, just in case, but we have a high confidence that comes from working together.

PREPARED STATEMENT

So in closing, this is the end of my first year in the State of Alaska, and it has been terrific. It is a warm community. There are no bashful pilots in the State of Alaska, so you certainly get to know their thoughts quickly.

With that, that concludes my statement. Thank you.

[The statement follows:]

PREPARED STATEMENT OF PATRICK N. POE

Senator Stevens and Congressman Young. Good Afternoon. I am Patrick Poe, the Federal Aviation Administration's ("FAA") Regional Administrator for the Alaskan Region. I appreciate the opportunity to appear before you today to discuss the status of aviation in Alaska and the many efforts that are under way to improve service to the 10,000 Alaskan pilots, the thousands of passengers and people of Alaska who depend upon aviation.

In my first year as Regional Administrator, I have attended many public meetings and have had numerous conversations with Alaskans across the state. I know that the people here are well informed about the FAA and our basic mission. As Administrator Garvey has repeatedly stated, our first priority is safety. Within Alaska, aviation remains the primary, and in some areas the sole, means of transportation. Increasing the level of safety in Alaska is critically important. We have recently undertaken a number of initiatives to improve the level of safe operations within Alaska. These initiatives include the Capstone program, the Alaska weather camera project, and the investment of millions of dollars from the Airport Improvement Program ("AIP") to improve and develop Alaska's aviation infrastructure. In addition, we have undertaken a number of initiatives that will place Alaska in the forefront of aerospace in the 21st century, most notably, the licensing of the first commercial space launches at Kodiak.

As I stated above, safety remains our top priority. Here in Alaska, we are cognizant of the unique weather and terrain that poses greater challenges to aviation. Indeed, for the past decade, there has been one accident every other day. And there has been an aviation-related fatality every nine days. We were sadly reminded of this by the crash last Tuesday of a plane departing from Bethel where all six persons on board were killed. In light of these statistics, the FAA developed the Capstone project. Capstone is an effort to use new technology to improve safe operations and substantially reduce the number of accidents. Under a contract with UPS Aviation Technologies, the Capstone project will equip up to 150 aircraft with government-furnished Global Positioning System based avionics. Coupled with a ground system of weather observation equipment, Capstone will provide pilots with terrain data and position reports of similarly-equipped aircraft. Capstone will increase the

number of airports served by an instrument approach. We believe that by equipping commercial aircraft in the Yukon-Kuskokwim Delta, an area in western Alaska not covered by radar that was selected for the test, we can make a substantial reduction in accidents.

It is important to note that the Capstone project reflects a real partnership between the FAA and the aviation industry within Alaska. We have had industry user participation throughout the entire design of the project. In addition to UPS Aviation Technologies, we are partnering with the University of Alaska, which is conducting pilot training in the use of the new equipment, and will conduct baseline research for use in measuring project results.

Another exciting program that is up and running this year is the Alaska Weather Cam project. This project places video cameras at bush airstrips and other remote locations to provide real time views of landing areas and mountain passes. To date the cameras are in operation at ten locations, four of which were initiated by the University of Alaska at Fairbanks. These cameras offer multiple views at each location, and compare a clear day picture with current conditions. Views are archived for later viewing and to track trends. Pilots can access the views of the landing areas and mountain passes through the FAA's Internet site. Additional funding will permit us to expand the program and install more cameras next year. In the meantime, we are exploring how to better use the visual information in our Flight Service Stations and are considering such issues as liability for interpreting the data to pilots, who ultimately have to make the decision to fly or not.

The Capstone and weather camera initiatives demonstrate that the Alaskan Region is a leader in demonstrating how to use new technologies to improve safety and develop greater efficiencies in the system to take aviation into the 21st century. But that leadership is not limited to commercial aviation. As I noted above, the Alaskan Region is Kodiak launch facility. Kodiak is the first commercial space launch facility to operate outside of a Federal facility. To date there have been two launches and more are anticipated in 2000.

Leading aviation into the 21st century is not limited to improvements in the operational aspects of aviation. The Alaska Region has made tremendous strides in our outreach to the Alaska Native community to educate the community about aviation and to increase awareness of the employment opportunities in the aviation industry here in Alaska. Our aviation education program delivers information and material to village schools as remote as Tununak. We support the cooperative effort of the Kuskokwim Tribal College, Yute Air and the University of Alaska to train Alaskans as pilots.

This outreach activity ties in with our safety initiatives because we believe that people who live here and understand the geography and climatic conditions will make better pilots in the long run. At present, Alaska does not produce enough of its own pilots to staff the industry so carriers must hire pilots from the lower 48. Very often, those pilots work a few years here in Alaska, build hours and leave, and the cycle starts over again. As a result of this summer's program, seven Alaskan Natives obtained their pilot's licenses and several are working toward commercial ratings. I was very pleased to be able to personally, recognize the work of one of the sponsors of the program, the Association of Village Council Presidents, at this year's Alaska Federation of Natives convention.

In addition to improving safety in the air, the FAA's Airport Improvement Program is critical to improving the airport infrastructure throughout Alaska. The AIP program, which was funded for fiscal year 1999 at $1.95 billion, provides funding to communities nationwide for critical infrastructure projects. Since 1990, annual AIP grants to Alaska have increased from approximately $50 million to $80 million. While some may not understand why Alaska should garner such amounts, you here know that we are a young state just developing the airport infrastructure that is essential for both air commerce and aviation safety. Our Airports Division, working with the sponsors such as the State of Alaska Department of Transportation and Public Facilities, developed a regional airports plan that addresses the needs for expanded runways, lighting and safety features. One of the most significant projects is the expansion and renovation of Anchorage International Airport. We were able to support the project with a letter of intent ("LOI") for future federal funding in the amount of $48 million that enabled the State to proceed with bonding.

The AIP program is just one aspect of the investment FAA continues to make in terms of navigation aids, communications systems and other facilities. Our construction program includes approximately 120 projects annually. Overall the region's total budget last year including AIP grants, construction, personnel and operating costs equaled $270 million.

Finally, I would like to note that we are now just 17 days away from the Year 2000. As you know, the FAA systems were deemed compliant in June. We in the

Alaska Region want to take this opportunity to express our appreciation for the cooperation of the State of Alaska and other governmental agencies and businesses with whom we have conducted Y2K exercises and discussed contingency plans. I assure you that the Region will be monitoring events December 30 through January 2 with additional personnel on the job.

In closing, I wish to thank each of you for your support of the FAA in Alaska. Our challenge here is very different from that of the agency in other regions of the country. We know that Alaskans are especially dependent upon aviation and we are committed to maintaining the best and safest system we can in partnership with the aviation community. I look forward to working with you on these and future projects within Alaska.

This concludes my prepared statement. I would be pleased to answer any questions that you may have.

Senator STEVENS. Thank you very much. Paul, do you want to go next?

STATEMENT OF PAUL BOWERS

Mr. BOWERS. Thank you, Senator. Good afternoon, and thank you for the opportunity to address this forum on Alaska aviation issues. There are three primary points I would like to speak to. The first one is the deficiencies in our rural Alaska airport system.

As you noted, we have an extensive aviation program here that is very dependent, that the communities are very dependent on for transportation. But unlike the rest of the country, where the airport infrastructure is relatively mature, where well-established, long, lighted, paved runways are commonplace, Alaska has a relatively immature airport infrastructure, where ours are typically rough-surfaced, short, and unlighted. That creates a bit of a problem when the State is so dependent upon them.

Of the 286 publicly owned, publicly used airports, the DOT operates 262 of them. Of them, 177 are gravel-surfaced, 43 are paved, 42 are float facilities. Of these, 94 are 3,000 foot in length or less, and 42 are less than 2,000 foot. IFR-capable airports are also in short supply, with only 61 of the 262 IFR capable.

Basically the needs for airport development have far surpassed funding. Even though we have done exceedingly well with AIP funds in recent years, we have needs that far exceed the supply. Historic AIP levels still leave unaddressed approximately $265 million in the next 5 years alone of infrastructure that is not being met with the current AIP level.

The second point I would like to note is the FAA national focus on airport safety area improvements, which we believe is detrimental to the runway infrastructure improvements that are actually needed. Briefly, the issue here is the FAA on a national basis prioritizes and allocates AIP dollars for improvements to safety areas, that area that is immediately adjacent to the runway that is brought to grade, free of obstructions, and the purpose of which is to reduce the risk to aircraft in the event of undershoot, or overrun, or some other unplanned excursion from the runway. The relative beneficial use perspective is important here in that the runway is used each and every time for take-off and landing, whereas the safety area is potentially utilized only if there is a problem, and often those problems develop from the runway surface itself.

In the lower 48, where we have got a well-established runway system, a national safety area priority policy does, indeed, make sense. We believe it does not make sense in Alaska, where so many

of our airport runways are substandard. That is the real problem that needs to be addressed here, and we believe this national policy uses up precious AIP dollars that could and should first be used to actually improve the runway surface. We believe this well-meaning but misdirected national priority system needs to be changed, and we would like some relief from that.

The third issue is that DOT supports the 5-year aviation strategic plan that was developed by the Alaska Aviation Coordination Council. That is an ad hoc group of aviation interests, period, that outlined fiscal year 200 through 2004 infrastructure deficiencies and needs and an associated resolution methodology.

The key elements of that that DOT supports are that public owned and used airports should be a minimum of 300 feet in length, if practical, with lights, and have at least some minimal shelter for passengers from inclement weather, that airports with scheduled service should have an all-weather approach and landing capability, that collection and dissemination of weather information should be available State-wide, and that so-called CNS, communication, navigation and surveillance capability, should also be State-wide. That, as Pat Poe noted, would support sufficient routing, traffic, and train avoidance, real-time flight locating, and enhanced search and rescue.

And finally, site-specific operational needs should be addressed, like video cameras and other nontraditional systems to relay mountain pass information and visibility information, for example.

Finally, we note that a lot of the accidents are caused between airports, and that lack of weather data and a lack of communication capability is the real problem. For example, there is no official weather west of Bethel, and coincidentally, or not coincidentally, that is a high accident area of the State. The strategic plan, which is a derivative of the Capstone program, addresses these issues.

PREPARED STATEMENT

DOT also supports expansion of the Capstone program on a State-wide basis, and with those issues, improving our rural airport system, applying FAA or AIP funding to runway improvements first, and supporting the Alaska aviation strategic plan I think will go a long way toward reducing our accident rate and making safer aviation in Alaska.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF PAUL BOWERS

This paper on Alaskan Aviation Issues is submitted as backup to verbal testimony of Paul Bowers, A.A.E., Director, Statewide Aviation, Department of Transportation & Public Facilities (DOT&PF), State of Alaska, before Senator Ted Stevens' Congressional Hearing re Alaskan Aviation Issues for the 21st Century, Loussac Library, Anchorage, AK, December 14, 1999. Issues are set forth as follows:

Deficiencies in Rural Alaska Airport Infrastructure

Unlike the other 49 states, where airport infrastructure is "mature", with well established, long, paved, lighted runways being commonplace, Alaska has a relatively immature airport infrastructure. Here gravel surfaced, short, unlighted airport runways are the norm. Ironically, this is where aviation and an airport system are vitally important. This is because our rural airport system effectively becomes our rural road system, as geographically some 90 percent of Alaska is inaccessible by road, which affects about 30 percent of the state population that has no year round

means of community ingress or egress except by air. That means no emergency medical, no commerce, no transportation link to the rest of the state or the world, except by air. And often that air service is via short, unlighted gravel surface runways.

Specifically, our Alaskan airport infrastructure consists of 286 publicly owned, public use airports, of which the State DOT&PF operates 262. Of these, 177 are gravel surfaces, 43 are paved, and 42 are seaplane basins. 94 airports are less than 3,000 feet in length (and of these, 42 are less than 2000 feet in length!). Most (237 of 262) are non-certificated (meaning they do not meet national airport FAR 139 certification standards that include Airport Rescue and Firefighting [ARFF] equipment and trained personnel; an emergency response plan; and maintenance standards). Additionally, Navaids are limited; only 61 of 262 state airports are equipped to support Instrument Flight Rule (IFR) usage.

Airport Development money is the missing ingredient to improve this airport infrastructure situation. Historically, the Airport Improvement Program (AIP—which is presently awaiting Congressional action) has provided approximately one half of our continuing airport infrastructure needs. However, that level still leaves airport development needs of approximately $265 million over the next five years unaddressed. Specific infrastructure deficiencies are defined and attached as part of the below referenced Five Year Plan.

FAA National Priority Focuses on Airport Safety Area Improvements, to the resultant detriment of Alaska Airport Runway Improvements

FAA follows a national policy of prioritizing and allocating AIP dollars for development of airport safety areas whenever any runway development or improvement is undertaken. (The "Safety Area" is that area surrounding the runway on the sides and ends that is brought to grade and free of obstructions, the purpose of which is to reduce risks to aircraft in the event of an undershoot, overrun, or other unplanned excursion from the runway). A relative use perspective is important here: the runway is used for each takeoff and landing, whereas the safety area is potentially utilized only when the pilot using the runway develops a problem, often resulting from activity on the runway.)

In the lower 48 where well established runways are commonplace, this national safety-area-priority policy makes sense. However, it does not make sense in Alaska, where so many of our airport runways are substandard (typically rough surfaced, too short, and unlighted, with minimal navaids), which is the real airport problem that needs addressing. If the runway length and width were up to reasonable standards, there would likely be less need for the safety area. Please note the DOT&PF is not opposed to Safety Area development. Rather it is a question of timing: DOT&PF fully supports safety area development after the primary issue of fixing poor condition runways is addressed. This FAA national policy uses up precious AIP dollars that could, and should, be used first to actually improve the runway surface. We need specific relief from this well meaning but mis-directed national prioritization policy.

Support for the Five Year Aviation Strategic Plan

The Alaska Aviation Coordination Council, an ad-hoc group of Alaskan aviation interests, has prepared a statement of fiscal year 2000 through 2004 Alaska Aviation infrastructure deficiencies and needs, with associated resolution methodology. The key elements of that plan DOT&PF supports are:

—Publicly owned and used airports should be a minimum of 3, 300 feet in length, with runway lights, and have at least a minimal shelter for passengers from inclement weather.

—Airports with scheduled air service should have an "all weather" approach and landing capability.

—Statewide availability of weather information systems (collection and dissemination).

—Communications, navigation and surveillance (so-called CNS) capability should be available state-wide to support efficient routing, traffic and terrain avoidance, real time flight locating, and enhanced search and rescue. CNS will include both Automated Dependent Surveillance Broadcast (ADS–B) data link and strategically placed radar in the Bethel area.

Statewide availability of Flight Information data that addresses site specific operational needs, such as Video Cameras and other Non-traditional systems (i.e., relay of mountain pass visibility information, VASI in lieu of PAPI light systems, etc.).

The intent of this Strategic Plan is to improve aviation safety in Alaska and literally bring Alaskan aviation into the 21st century. While doing so, it is important to note that the majority of aircraft accidents happen during phases of flight other

than takeoff or landing. If this is to be remedied, the problems causing the accidents needs to be addressed.

A recurrent causal theme in Alaskan aviation accidents is lack of weather data and/or lack of communication capability to validate pilot decisions (for example, there is no official weather west of Bethel!). Both of these issues are addressed in the Strategic Plan, which in part is an outgrowth of the FAA Capston program now underway in the Yukon-Kuskokwim area.

Capstone is a widely supported effort will gain ten much needed AWOS (Automated Weather Observation Station) installations, and Capstone avionics installations will enable weather and communication info transmission to so equipped aircraft, as well as positional awareness and aircraft tracking capability for Search and Rescue purposes. DOT&PF supports expansion of the Capstone program statewide.

Bald Eagles/Aircraft Hazards

Bald eagles nests on airport property near or within the approach and departure ends of runways create safety hazards for both the aircraft and the eagles. The Bald and Golden Eagle Protection Act of 1940 prevents airports and the Fish and Wildlife Service from removing these hazards. Furthermore some nests are in or near trees that violate FAA height restrictions, but the trees cannot be removed or shortened because of the restrictions in this Act.

This Act needs to be amended to allow removal of bald eagle nests in areas that create safety hazards for aircraft. Such amendment could, of course, be specific to Alaska if necessary, as Alaska has many bald eagles and has extensive alternate habitat for these birds.

In summary, we believe much safer aviation in Alaska will result from improving our rural airport system, applying precious AIP funding to runway improvements first, and implementing an Alaska Aviation Strategic Plan. Thank you for the opportunity to explain these aviation infrastructure needs. Attached is a copy of the Alaska Aviation Coordination Council Five Year Strategic Plan. Please advise if any questions or additional information is desired.

ALASKA AVIATION COORDINATION COUNCIL

STRATEGIC PLAN—FISCAL YEAR 2000 THROUGH 2004

Intent

To articulate Alaska Aviation infrastructure deficiencies and needs, and to outline a resolution methodology.

Background

Alaska is unique in lacking highway infrastructure. In a State that literally comprises 16 percent of the total U.S. land mass, only about 10 percent of the State geographically is accessible by road. This forces those non-road accessed communities, comprising 30 percent of the population, to heavily rely on aviation for day sustenance, transportation (schools, work, etc.), and livelihood.

Vision

That Alaska will enjoy an air transportation system that has safe, efficient, and reliable access to population centers and other areas of general and commercial interest. This same transportation system would enhance the health and welfare of residents and visitors alike, while serving as a vehicle for commerce throughout the State.

Discussion

Federal Programs involving disbursement of dollars for transportation normally balance highway and aviation needs. However, in Alaska, environmental, logistical, and financial limitations, preclude highway construction in many areas, forcing transportation requirements to be highly dependent on aviation. As a general rule, highway funding is not available to be used for aviation infrastructure. The resulting imbalance is a transportation infrastructure that is inadequate and unable to provide the safety and efficiency commonly expected of transportation systems in the rest of the United States. No where else in this country is there a complete dependency on aviation for basic transportation and commerce as in Alaska.

A safer airport and aviation infrastructure in Alaska will bring Alaska up to par with other states' basic transportation systems.

Key Elements of a Safe and Efficient Alaskan Air Transportation Infrastructure Include

Publicly owned and used airports should be a minimum of 3,300 feet in length,[1] with runway lights, and have at least a minimal shelter for passengers from inclement weather.

Airports with scheduled air service have an "all weather" approach and landing capability.

Availability of weather information systems (collection and dissemination).

Communications, navigation and surveillance (CNS) capability should be available state-wide to support efficient routing, traffic and terrain avoidance, real time flight locating, and enhanced search and rescue. CNS will include both Automated Dependent Surveillance Broadcast (ADS–B) data link and strategically placed radar in the Bethel area.

Availability of Flight Information data that addresses site specific operational needs, such as Video Cameras and other Non-traditional systems (i.e., relay of mountain pass visibility information, VASI in lieu of PAPI light systems, etc.).

A change of U.S. Postal Service policies to remove pressure on carriers to deliver U.S. Mail within strict time periods without consideration of weather.

Stable (local) aviation work force, including an emphasis on aviation education.

A Standing Aviation Advisory Council to ensure continuous safety and user need assessment and input to ensure effective planning and development.

Comparison of Alaskan Air Transportation Infrastructure to What is Needed

Public airports minimum 3,300 foot length, runway lights, and minimal shelter.—150 Alaska airports are less than 3,300 feet (35 runways less than 2,000 feet). 71 airports unlighted. More than half of rural airports without minimal passenger shelter.

Airports with scheduled air service have an "all weather" approach and landing capability.—176 public use Alaska airports do not have basic instrument approach capability. Weather information, communications capability, and approach procedures are required to support commercial, passenger, and U.S. Mail operations.

Communications, navigation and surveillance (CNS) capability should be available statewide to support efficient routing, traffic and terrain avoidance, real timeflight locating, and enhanced search and rescue.—194 locations in Alaska need CNS capability. Data-link ground stations to provide CNS capability are projected in the Safe Flight 21 budget line items for fiscal year 1902.

Stable (local) aviation workforce.—Alaska currently has a high turnover in the aviation work force. This appears to be due to a combination of factors.

At the entry level, non-local pilots, dispatchers, mechanics and other skilled workers often serve in bush locations while building experience enroute to promotion elsewhere. In turn, their successors are also of non-local origin, because local bush based personnel do not have the entry-level training and skills required for employment in the aviation industry, which training is not readily available in the bush environment. The resulting systemic turnover has historically precluded a stable, experienced workforce, which likely contributed to the higher accident rate associated with rural operations. Local training and aviation-focus educational opportunities can remedy this.

Conversely, at the senior level, imposition of FAR Part 121 rules on historically Part 135 operations, specifically the mandatory retirement at age 60 rule, is forcing experienced and locally knowledgeable airmen into comparatively early retirement. Waiver of the age 60 rule for Alaskan operations would beneficially resolve this.

As a direct result of these two issues, Alaska aviation experience levels are eroded, and aviation safety is significantly and adversely impacted.

Flight Information data needed to address site specific operational needs.—Site specific operational needs can be addressed through non-traditional application of technology, such as Video Cameras in mountain passes to supplement weather (visibility, etc.) information and associated technology to relay such information, improved runway alignment information from older VASI equipment in lieu of newer PAPI approach light systems, etc.

U.S. Postal Service policies pressure carriers to deliver U.S. Mail regardless of weather.—Present system penalizes carriers, by loss of Postal revenue, who do not deliver mail within specific allocated timeframes. U.S. Mail distribution system should be revamped to allow redispatch of mail without penalization of carriers who decline to fly in unsafe conditions.

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[1] Nominal 3,300 foot Runway length, with lights, will accommodate FAA recommended minimum 3,200 foot length for instrument flight operations, plus 100 feet to accommodate terrain and temperature induced density altitude differences at various sites throughout Alaska.

Bethel Radar.—The Capstone program does not currently include radar for the Bethel area, or elsewhere in Alaska. Radar is recommended, initially in Bethel, ultimately elsewhere as needed, as it is necessary to view both the ADS–B equipped and non-equipped aircraft. Capstone will not be able to supply ADS–B equipment for all of the 'resident' aircraft flying in the Bethel area, plus other non-ADS–B-equipped aircraft periodically fly in or through the Bethel area. Radar will provide the locations of these non-equipped aircraft to air traffic control, allowing a comparison of the effectiveness of ADS–B to eventually replace radar. The MICRO–EARTS equipment currently used at the Anchorage Air Traffic Control Center has software in the final stages of testing and approval to allow both radar and ADS–B aircraft position reports to be displayed.

Continuous safety and user need assessment to ensure effective planning and development.—Currently, no formal communication mechanism exists between the FAA and the aviation community at large to ensure effective feedback and/or advice in planning programs or resolving issues. Informal processes (i.e., Alaskan Aviation Coordination Council, Capstone industry Council, Weather Enhancement Group, etc.) lack the structure and authority necessary to ensure follow-up and accountability.

Existing legislation empowers the FAA Administrator with authority to waive or modify regulations as necessary to address specific Alaska aviation issues. However, current processes do not provide a widely accepted forum that effectively works towards resolution of such issues. As a result, Alaska specific aviation issues are often worked congressionally prior to sufficient constructive dialogue between FAA and the aviation community. Often this results in a 'situation' mentality, wherein issues are not formally addressed or effectively resolved until a crisis level is reached. Multiple examples exist of issues that could have been better addressed through improved communications.

A formal "Alaskan Federal Aviation Advisory Council" to the Alaskan Region FAA, that includes multiple representative elements of the Alaskan aviation community, is recommended to address this communication deficiency.

FIVE YEAR P1AN [2]

Year 1—fiscal year 2000:
—Establish a formal Alaskan Aviation Advisory Council comprised of the Alaskan aviation industry to assist the Alaskan Region FAA planning efforts.
—Coordination and assessment of Alaska aviation infrastructure needs.
—Phase in (over initial three years) funding of the State Five-Year Airport Capitol Improvement Program.
—Establish Alaska site-specific supplemental weather, NAV-aid, and lighting systems operational needs.
—Develop locally available aviation skills training programs.
Year 2—fiscal year 2001:
—Begin airport infrastructure enhancements.
—Develop/Publish GPS approaches.
—Standardize ADS/FIS system design.
—Begin installation of Alaska site-specific supplemental weather, NAV-aids and lighting systems equipment (including Bethel radar).
Year 3—fiscal year 2002:
—Continue airport infrastructure enhancements.
—Flight check & publish approaches.
—Begin ADS–B/FIS equipment installations.
—Continue installation of Alaska site-specific supplemental weather, NAV-aids and lighting systems equipment.
Year 4—fiscal year 2003:
—Continue airport infrastructure enhancements.
—Continue ADS–B/FIS equipment installations.
—Continue weather and lighting systems.
—Expand CNS network to ARTCC and FSSs.
Year 5—fiscal year 2004:
—Complete Five-Year airport infrastructure enhancements.
—Complete ADS–B/FIS equipment installations.
—Complete weather and lighting systems.

[2] The grand total cost of this five year plan is estimated at $265,130,000. The most efficient way to complete this five-year program is to receive one-fifth of the funding in each of the next five years, or approximately $53 million each year. This will allow the project development work and actual construction work to be completed within the target 5 year period.

List of specific infrastructure improvement needs and estimated improvement costs at runways less than 3,300 foot lengths provides detail re above is attached.

AACC FIVE YEAR AVIATION STRATEGIC PLAN

Community	Existing surface	Existing length	Existing inst. appr.	Total estimated cost	Notes
AKIACHAK	Gravel	1,600		$4,000,000	
ALAKANUK	Gravel	2,200		7,000,000	
ALEKNAGIK	Gravel	2,100		3,000,000	
ANVIK	Gravel	2,900	NDB, GPS	7,500,000	
ATMAUTLUAK	Gravel	2,000		2,400,000	
CHEFORNAK	Gravel	2,600		7,000,000	
CHEVAK	Gravel	2,600		6,500,000	
CHICKEN	Gravel	2,500		4,500,000	Road accessible in summer only. Creek relocation required for extension.
CHIGNIK	Gravel	2,600	Terrain limited	4,500,000	Terrain Limited, may not be able to construct full 3,300 foot length.
CHIGNIK FLATS	Gravel	1,600	Terrain limited	4,500,000	Terrain Limited, may not be able to construct full 3,300 foot length.
CHIGNIK LAKE	Gravel	2,800	Terrain limited	3,000,000	
CHUATHBALUK	Gravel	1,500		6,500,000	
CLARKS POINT	Gravel	2,600		8,200,000	
CORDOVA	Gravel	1,800	Terrain limited	4,500,000	Terrain Limited, may not be able to construct full 3,300 foot length.
CROOKED CREEK	Gravel	2,000	Terrain limited	4,500,000	Terrain Limited, may not be able to construct full 3,300 foot length.
DEERING	Gravel	2,600		3,000,000	
EEK	Gravel	1,400		2,800,000	
EKWOK	Gravel	2,700		2,500,000	
ENGLISH BAY	Gravel	1,800	Terrain limited	5,000,000	Airport expansion not practical, road to Nanwalak best transportation solution.
FALSE PASS	Gravel	2,100	Terrain limited	4,500,000	Terrain Limited, may not be able to construct full 3,300 foot length.
GOODNEWS	Gravel	2,800		2,500,000	
GRAYLING	Gravel	2,300		1,500,000	
KARLUK	Gravel	2,000		2,500,000	
KIPNUK	Gravel	2,100		5,500,000	
KOBUK	Gravel	2,300		3,500,000	
KOKHONAK	Gravel	2,800		2,500,000	
KONGIGANAK	Gravel	1,900		3,780,000	
KWETHLUK	Gravel	1,700		4,500,000	
KWIGILLINGOK	Gravel	2,500		3,000,000	
LARSEN BAY	Gravel	2,700	Terrain limited	4,500,000	Terrain Limited, may not be able to construct full 3,300 foot length.
LEVELOCK	Gravel	1,900		3,000,000	
LIME VILLAGE	Gravel	1,400		500,000	
LITTLE DIOMEDE ISLAND/IGNALUK	Gravel	100	Terrain limited	1,000,000	Runway construction not practical. Expand heliport, erosion stabilization.

AACC FIVE YEAR AVIATION STRATEGIC PLAN—Continued

Community	Existing surface	Existing length	Existing inst. appr.	Total estimated cost	Notes
MANLEY HOT SPRINGS	Gravel	2,900		4,500,000	Cannot be extended, project would relocate runway.
MANOKOTAK	Gravel	2,700		4,500,000	Terrain Limited, may not be able to construct full 3,300 foot length.
MOUNTAIN VILLAGE	Gravel	2,500		2,500,000	
NEW STUYAHOK	Gravel	1,800		8,500,000	
NIGHTMUTE	Gravel	1,600		4,500,000	
NIKOLAI	Gravel	2,300		3,200,000	
NONDALTON	Gravel	2,800		2,500,000	Terrain Limited, may not be able to construct full 3,300 foot length.
NUNAPITCHUK	Gravel	2,000		1,200,000	Terrain Limited, may not be able to construct full 3,300 foot length.
OLD HARBOR	Gravel	2,700	Terrain limited	4,500,000	Terrain Limited, may not be able to construct full 3,300 foot length.
OUZINKIE	Gravel	2,100		8,500,000	
PERRYVILLE	Gravel	2,500		2,500,000	
PILOT STATION	Gravel	2,500		7,000,000	Master plan underway to identify relocation site.
PORT GRAHAM	Gravel	2,000		4,500,000	Relocation required.
PORT LIONS	Gravel	2,200		7,000,000	Terrain Limited, may not be able to construct full 3,300 foot length.
QUINHAGAK	Gravel	2,600		5,300,000	Relocation required.
RUSSIAN MISSION	Gravel	2,700		4,500,000	
SELDOVIA	Gravel	1,800	Terrain limited	4,500,000	Terrain Limited, may not be able to construct full 3,300 foot length.
SHAGELUK	Gravel	2,300		5,200,000	
STEVENS VILLAGE	Gravel	2,100		8,300,000	
STONY RIVER	Gravel	2,500		7,000,000	Relocation required for a 3,300 foot RWY.
TAKOTNA	Gravel	1,700		5,500,000	Relocation required for a 3,300 foot RWY.
TOKSOOK BAY	Gravel	1,800		4,500,000	
TULUKSAK	Gravel	2,500		3,500,000	
TUNTUTULIAK	Gravel	1,800		2,750,000	
TUNUNAK	Gravel	2,000		5,000,000	
Total for Runways				255,130,000	
Bethel Area Terminal Radar				10,000,000	
Grand Total				265,130,000	

Notes: (1) The average runway reconstruction cost is approximately $4,500,000. This number was used through this estimate where detailed costing is not available. Airports requiring site relocation may require additional funds to complete.

(2) Capital installation costs of automatic Weather Reporting machines, such as AWOS–3, are approximately $150,000 each per installation. This does not include annual operational costs. The machines could be installed with the airport improvement project as a portion of the project and turned over to the FAA for operation and maintenance.

STATEMENT OF MORTON V. PLUMB, JR.

Senator STEVENS. Thank you very much. Mort, do you have a statement?

Mr. PLUMB. Senator Stevens, Congressman Young, we have a few prepared comments, and also present some for entrance into the record.

Senator STEVENS. All of the prepared statements will be printed in the record in full, and your comments will appear after each one of those individually.

Mr. PLUMB. Anchorage International Airport is the gateway to Alaska and Anchorage residents and for all Alaska visitors. The Gateway Alaska road and terminal improvements program will address many of the passenger service needs. Additional passenger service needs may include people-mover connector between the domestic and international terminal, and in the future we will need to reconstruct the apron and the jetways at the international terminal.

KOREAN VISA WAIVER REQUIREMENTS

Relaxation of the Korean visa waiver requirements would be very helpful. Current U.S. regulations require Korean visitors to apply for a visa to enter the United States. This requirement has had a negative impact on the development of international tourism to Alaska as it applies to South Korea.

The State of Alaska has felt the damaging impacts of this restrictive policy. This is evident by Korean Airlines flights that are bypassing Anchorage, servicing Vancouver, British Columbia, and Toronto. As such, the State of Alaska would like to encourage the formalization of talks by the State Department to develop a pilot program for relaxing of visa requirements for travelers between South Korea and Alaska with regard to liberalizing passenger service for Alaska.

In an effort to expand both international and domestic passenger opportunities, the Alaska International Airport System would like to see established a pilot program for the liberalization of passenger service for Alaska. This program would allow for travel between Alaska and other domestic points via international carrier. Allowing international carriers to enplane and deplane domestic passengers enhances route profitability, increases international air service to less competitive markets, and provides Alaskans direct air service to additional destinations.

AIR CARGO BUSINESS

Cargo is big business at Anchorage International Airport. Air cargo is the fastest-growing sector at Anchorage International Airport. The airport is responding with a focus on marketing and infrastructure. In marketing, a comprehensive program for retaining and expanding and attracting cargo activity focuses on two levels.

On the international level, the airport is seeking to take maximum advantage of our global location that we can reach 95 percent of the industrial centers of the northern hemisphere within 9 hours flight time. We are seeking liberalization of international aviation agreements to open up new cargo transfer opportunities

for foreign and domestic carriers. The Alaska International Airport System would like to encourage the formalization of talks between USDOT and the State Department to liberalize international air cargo service beyond open skies, and look at relaxing regulations against seventh and eighth freedoms.

With regard to infrastructure, Anchorage International Airport faces global challenges to its current role as the world-class air cargo crossroads, long-range aircraft in the next decade, a trend we cannot control. Foreign airports hungry for their piece of our pie is another trend we cannot control. However, modern and efficient airport facilities is something we can control.

LAKE HOOD FLOAT PLANE FACILITY

The Alaska International Airport System, with the critical assistance of the FAA airport improvement program, must continue to improve its competitive position to serve air cargo markets. With regard to general aviation, Lake Hood provides access to rural Alaska for both residents and tourists. No other public float plane facilities exist in the Anchorage area. Additional needs to support this vital facility include:

Relocation of tie-downs from Anchorage International to Lake Hood to reduce taxi distances and vehicle-aircraft conflicts.

Dredging Lake Hood to remove shallow areas in the lake that create safety concerns during low water periods.

Construct shoreline stabilization in eroding areas. This could be developed as a Corps of Engineers project.

Address safety concerns by constructing a safety area at Hood strip, establishing buffer areas around the taxiways and constructing new taxiways where aircraft can taxi on the roadways.

Support for a new float plane facility to serve Anchorage and the Matsui area is very sorely needed.

REGULATORY AND SAFETY ISSUES

With regard to regulatory and safety issues, wetlands mitigations, wetlands and airports in Alaska are generally incompatible. Wetlands often attract birds, creating hazards for aircraft operations. Airports in Alaska must fill wetlands to both reduce bird hazards as well as construct necessary aviation infrastructure. FAA safety guidelines regarding wetlands are in conflict with wetland regulations under the Clean Water Act.

While the FAA guidelines require elimination of wetlands that create safety hazards, other Federal agencies restrict construction on the airport during nesting season, require expensive wetlands replacement mitigation at airports, and limits the types of land uses that can occur on airport wetlands.

Anchorage International Airport air traffic control tower. Certain parts of the airfield at Anchorage International Airport cannot be seen by the air traffic control tower. Lack of tower visibility reduces safety and increases aircraft delays. Furthermore, the tower is currently located within the terminal road loop on land that could otherwise be used for other necessary functions at the airport.

Runway and aircraft deicing is necessary for safe aircraft operations in the air and on the ground. Deicing chemicals are under

increasing control and regulation by the Environmental Protection Agency because of their effect on water bodies around the airports. Capture and treatment of deicing chemicals is difficult and expensive. Many less expensive solutions at other airports do not work in Alaska. A deicing collection facility and treatment plant may be required for the airport to continue to grow and provide for safe operations in an environmentally friendly manner.

PREPARED STATEMENT

Senator, Congressman, this concludes my testimony. Thank you for the opportunity, and thank you for the support at Anchorage International Airport.

[The statement follows:]

PREPARED STATEMENT OF MORTON V. PLUMB

PASSENGER SERVICES/BUSINESS OPPORTUNITIES

Passenger Facilities

Anchorage International Airport is the gateway to Alaska for Anchorage residents, rural Alaska, and visitors. The Governor's Gateway Alaska road and terminal improvements program will address many passenger services needs. Additional passenger service needs include:

—Upgraded (with people mover) connector between domestic and international terminal
—Reconstructed international passenger terminal apron and jetways
—Additional parking and rental car facilities

Relaxation of Korean Visa Requirements

Current U.S. regulations require Korean visitors apply for a visa to enter the U.S. This requirement has had a negative impact on the development of international tourism to Alaska as it applies to South Korea.

The current application requirements generally require the traveler to take an additional trip to another city to apply and obtain a U.S. visa.

The State of Alaska has felt the damaging impacts of this restrictive policy. This is evident by Korean Airlines flights that are bypassing Anchorage and servicing Vancouver, British Columbia and Toronto.

As such, the State of Alaska would like to encourage the formalization of talks by the State Department to develop a pilot program for the relaxing of Visa requirements for travelers between South Korea and Alaska.

Liberalization of Passenger Service for Alaska

In an effort to expand both international and domestic passenger opportunities, the Alaska International Airport System would like to see established a pilot program for the liberalization of passenger service for Alaska. This program would allow for travel between Alaska and other domestic points via an international carrier.

Allowing international carriers to enplane and deplane domestic passengers enhances route profitability, increases international air service to less competitive markets, and provides Alaskans direct air service to additional destinations.

CARGO SERVICES/BUSINESS OPPORTUNITIES

Air Cargo is the fastest growing sector at Anchorage International Airport. The Airport is responding with a focus on marketing and infrastructure.

Marketing

A comprehensive program for retaining, expanding and attracting cargo activity focuses on two levels:

1. On the international level, the Airport is seeking to take maximum advantage of our global location reaching 95 percent of the industrialized centers of the Northern Hemisphere within 9 hours flight time. We are:

A. Seeking liberalization of international aviation agreements to open up new cargo transfer opportunities for foreign and domestic carriers here. The Alaska International Airport System would like to encourage the formalization of talks between the U.S. DOT and the State Department to liberalize international air cargo

service beyond Open Skies and look at relaxing the regulations against seventh and eighth freedom flights.

B. Strengthening business relationships with industry leaders by frequent air carrier and air freight forwarder contact to ride the wave of change in "time definite" delivery of cargo and small packages.

—This requires personal contact in airline headquarters in Asia, Europe and the United States.

—The Airport brings many airline executives to our turf at our annual "Top of the World Air Cargo Summit".

—The Airport participates in national policy formation affecting cargo issues by serving as Chair of the Airports Council International Air Cargo Subcommittee.

—Airport staff provides practical assistance to carriers and logistics providers in locating usable airport land, operating efficiently and keeping reliability at the highest levels.

2. Within Alaska shipping more fresh and live Alaskan seafood is certainly the best opportunity in exports. Our Seafood Working Group is tackling obstacles and has a goal of doubling air shipped fish and shellfish in three years.

Infrastructure

AIA faces global challenges to its current role as a world class air cargo crossroads:

—Long range aircraft in the next decade, a trend we cannot control

—Foreign airports hungry for their piece of the pie, another trend we cannot control

—Modern, efficient airport facilities, which we can do something about.

Modern and efficient infrastructure is essential to keep abreast of technological change and the pace of growth. Infrastructure improvements at AIA include new taxiways to reduce airfield delays, cargo support facilities, seamless access under runways between airparks, emergency operations center and maintenance facilities to ensure a safe and efficient operating environment, and navigational improvements.

The Alaska International Airport System, with the critical assistance of the FAA Airport Improvement Program, must continue to improve its competitive position to serve air cargo markets.

GENERAL AVIATION SERVICES/BUSINESS OPPORTUNITIES

Lake Hood provides access to rural Alaska for both residents and tourists. No other public floatplane facilities exist in the Anchorage area. Additional needs to support this vital facility include:

—Relocation of tie downs from Anchorage International to Lake Hood to reduce taxi distances and vehicle/aircraft conflicts and free up space at AIA for other uses.

—Dredging Lake Hood to remove shallow areas in the Lake that create safety concerns during low water periods. Construct shoreline stabilization in eroding areas. This could be developed as a Corps of Engineers project.

—Address safety concerns by constructing a safety area at Hood Strip, establishing buffer areas around taxiways, and constructing new taxiways where aircraft taxi on roadways.

—Support for a new floatplane facility to serve the Anchorage/Mat-Su area, address unmet demand for floatplane slips, and relieve airspace and airport congestion.

REGULATORY/SAFETY

Wetlands Mitigation and Bird Hazards

Wetlands and airports in Alaska are generally incompatible. Wetlands often attract birds, creating hazards for aircraft operations. Airports in Alaska must fill wetlands to both reduce bird hazards as well as construct necessary aviation infrastructure. FAA safety guidelines regarding wetlands are in conflict with wetland regulations under the Clean Water Act. While the FAA guidelines require elimination of wetlands that create safety hazards, other federal agencies restrict construction on the airport during nesting season, require expensive wetlands replacement (mitigation) near airports, and limit types of land uses that can occur on airport wetlands.

Airspace Capacity

The FAA is completing an Anchorage Area Airspace Study that is identifying ways to reduce aircraft delays in the air and on the ground in the Anchorage area.

While the study is not yet complete, it appears some ideas, such as establishing new flight procedures, corridors, or constructing new runways or taxiways at Elmendorf and Anchorage International Airport will require further evaluation. Because the issues are complex and involve many levels of government and many airports, a formal interagency working group may be needed.

Anchorage International Airport Air Traffic Control Tower

Certain parts of the airfield at Anchorage International Airport cannot be seen by the Air Traffic Control Tower. Lack of tower visibility reduces safety and increases aircraft delays. Furthermore, the tower is currently located within the terminal road loop, on land that could otherwise be used for terminal parking and terminal-related functions. These safety, efficiency and land use concerns could easily be addressed if the Air Traffic Control Tower at Anchorage International Airport was relocated.

Deicing

Runway and aircraft deicing is necessary for safe aircraft operations in the air and on the ground. Deicing chemicals are under increasing control and regulation by the Environmental Protection Agency because of their affect on water bodies around airports. Capture and treatment of deicing chemicals is difficult and expensive. Many less expensive solutions at other airports do not work in Alaska. A deicing collection and treatment facility may be required for the airport to continue to grow and provide for safe operations in an environmentally friendly manner.

Senator STEVENS. And we are going to have some questions about that, Mort.

Jim LaBelle.

STATEMENT OF JAMES D. LA BELLE

Mr. LABELLE. Good afternoon, Senator Stevens and Congressman Young. It is a pleasure to represent the National Transportation Safety Board before you today regarding aviation safety in Alaska.

Flight operations in Alaska are diverse, with challenging environments, which is rough terrain, adverse weather, and unique air transportation requirements. Due to the large geographic area and the lack of other forms of transportation, aviation is often the only way to travel. These challenges increase the risk to safe flight operations.

Because of Alaska's unique aviation needs, the National Transportation Safety Board has had a longstanding interest in aviation safety in Alaska. In 1980, the safety board published a special study on the air taxi industry in Alaska. Although we have seen improvements to the safety of the aviation system in Alaska as a result of recommendations issued from that study, investigations indicated that the safety issues identified in the 1980 study continue to be a concern. Therefore, in 1995, the safety board published a second study on aviation safety in Alaska.

As a result of that study, new safety recommendations were issued regarding weather observing and reporting, airport inspections and airport condition reporting, pilot flight, duty, and rest times, visual and instrument flight rules, and the needs of special aviation operations in Alaska.

ACTIONS TAKEN IN RESPONSE TO NTSB STUDY

The safety board is encouraged by the actions taken since publication of our study. For example, a demonstration project for a satellite-based navigation and traffic surveillance is underway in the Yukon-Kuskokwim region as part of the FAA's Capstone project.

The FAA approved the use of single-engined airplanes for commercial passenger-carrying flight operations under instrument flight rules.

The FAA and the National Weather Service implemented a test program in which color video cameras provide real-time weather information available over the Internet. The FAA and the State of Alaska are cooperating to equip and train ground personnel in Alaskan airports so they can provide near real-time information directly to pilots by radio. The FAA has fully staffed its Alaska Regional Airport Certification Office, and the FAA and the State of Alaska are cooperating to improve the inspection program for airports in the State, and the FAA implemented a State-wide program to collect and disseminate information about Alaskan airport conditions provided by pilots and unofficial observers through the automated flight service station network.

As you are aware, Public Law 106–69, the Transportation and Related Agencies Appropriations Act for Fiscal Year 2000, directed that an interagency initiative, with the goal of reducing the number of occupational aviation fatalities in Alaska and the number of aviation accidents and resultant deaths in the State, be undertaken. We believe this initiative, which involves the FAA, the NTSB, the National Weather Service, and the National Institutes for Occupational Safety and Health, or NIOSH, is a good step toward improving aviation safety in Alaska. You may be assured that the safety board will cooperate in every way possible with this effort to its completion.

Mr. Chairman, it should be noted that over 90 percent of the accidents that occur in the State are attributable to human factors and operational errors. The ultimate responsibility for any flight lies with the pilot and a good educational program will go far to eliminating unwarranted risk-taking and human errors.

Most commercial operators are dedicated to providing the traveling public with the highest level of safety, but our accident investigations show that there is often inadequate pilot training for the environment in which they fly, less than adequate management oversight, and a less than aggressive safety program, or no safety program at all. To decrease the 90 percent human error figure, these issues must be addressed by the Alaska aviation industry.

PREPARED STATEMENT

Mr. Chairman, that completes my prepared remarks, and I would be happy to respond to any questions you have.

[The statement follows:]

PREPARED STATEMENT OF JAMES LABELLE

Good morning Mr. Chairman and members of the Delegation. It is a pleasure to represent the National Transportation Safety Board before you today regarding aviation safety in Alaska.

Between 1990 and 1998, there were 1,510 aviation accidents, an average of one accident every 2 days, that took the lives of 355 people. The commercial aviation accident rate in Alaska is three to four times greater than that of the other 49 States. Indeed, we were saddened to learn of the most recent commuter airline accident that occurred just last Tuesday 50 miles from Bethel, Alaska. That accident took the lives of 6 people. It is also significant to note that aircraft accidents are the leading cause of occupational fatalities in Alaska.

Flight operations in Alaska are diverse, with a challenging environment, such as rough terrain, adverse weather, and unique air transportation requirements. Due to the large geographic area and lack of other forms of transportation, aviation is often the only way to traverse much of the State. These challenges increase the risks to safe flight operations.

Because of Alaska's unique aviation needs and diverse challenges, the National Transportation Safety Board has had a longstanding interest in aviation safety in Alaska. In 1980, the Safety Board published a special study on the air taxi industry in Alaska. As a result of that study, the Board issued 10 safety recommendations to the Federal Aviation Administration (FAA) and the State concerning the planning and development of Alaska's aviation system and infrastructure, weather observation and dissemination of weather information, regulatory surveillance and operator safety oversight. As a result of those recommendations, we have seen many improvements to the safety of the aviation system in Alaska.

Despite these recent improvements, Board accident investigations indicated that the safety issues identified in the 1980 study continued to be of concern. In 1995, the Safety Board published a second study on aviation safety in Alaska. As a result of that study, 23 new safety recommendations were issued to the FAA, the United States Postal Service, the National Weather Service (NWS), and the State of Alaska regarding weather observing and reporting; airport inspections and airport condition reporting; pilot flight, duty, and rest time; visual and instrument flight rules; and the needs of special aviation operations in Alaska. Twenty-one of those recommendations have been classified as acceptable. The Safety Board is encouraged with action taken since publication of our study. For example:

—A demonstration project for satellite-based navigation and traffic surveillance is underway in the Yukon Kuskokwim Region of Alaska, as part of the FAA's Capstone Program;

—The FAA approved the use of single-engine airplanes for commercial passenger-carrying flight operations under instrument flight rules;

—The FAA and the NWS implemented a test program in which remote color video cameras provide real-time weather information, available over the Internet. As of mid-1999, video cameras are providing views of several airport environments and mountain passes within Alaska;

—The FAA and the State of Alaska are cooperating to equip and train ground personnel at Alaskan airports so they can provide near real time information directly to pilots by radio. The State of Alaska implemented a program to equip and train airport maintenance personnel for radio updates;

—The FAA has fully staffed its Alaskan Region airport certification office, and the FAA and the State of Alaska are cooperating to improve the inspection program for airports in the State; and

—The FAA implemented a state-wide program to collect and disseminate information about Alaskan airport conditions provided by pilots and unofficial observers through the automated flight service station network.

Many of these were taken as a result of the efforts of the Alaska Congressional Delegation, and we commend you for your continued work on these matters.

Unfortunately, two of the safety recommendations issued as a result of our 1995 study were closed as unacceptable action. Those recommendations were:

To the Federal Aviation Administration

Ensure, at all automated surface weather observing sites in Alaska for which FAA is responsible, and where currently there are qualified FAA weather observers (including contract weather observers) on site, that (1) operationally significant information, including distant weather 3 information, is manually added to automated weather observations until technological progress eliminates the need; and (2) all such information is combined and disseminated in a single aviation weather report.

To the National Weather Service

Revise current policies to provide mike-in-hand (near real-time) radio service for aviation weather information at locations in Alaska where National Weather Service and surface and contract personnel are sited until automated surface weather observing systems transmit observations of an operationally significant weather phenomena to pilots operating in the terminal area.

We believe the interagency initiative directed in Public Law 106–69, the Transportation and Related Agencies Appropriations, fiscal year 2000, is a good step toward improving aviation safety in Alaska, and we look forward to working on the unacceptable recommendation issues as part of that effort.

As you are aware, the interagency initiative involves four federal agencies—the FAA, the NTSB, the NWS, and the National Institute for Occupational Safety and

Health (NIOSH). This initiative involves five elements: (1) the gathering and analyzing of data; (2) bringing together working groups, including representatives of the aviation industry, the aviation workforce, and the insurance industry; (3) working with local professional groups such as individual pilots and the Alaska Airmen's Association, industry, and educational leadership; (4) evaluating the effectiveness of changes in flight safety practices; and (5) evaluating progress and suggesting additional improvements.

The goal of this three-year joint effort is to reduce the number of occupational aviation fatalities in Alaska by 50 percent for the years 2000 through 2009, and to reduce substantially the number of aviation accidents and resultant deaths in the State. You may be assured that the Safety Board will cooperate in every way possible with this effort to its completion.

Mr. Chairman, these initiatives will go a long way to improving aviation safety in Alaska, but it should be noted that over 90 percent of the accidents that occur in the State are attributable to human factors and operational errors. The ultimate responsibility for any flight Res with the pilot, and a good educational program will go far to eliminating unwarranted risk taking and human errors. Most commercial operators are dedicated to providing the traveling public with the highest level of safety. But our accident investigations show that there is often inadequate pilot training for the environment in which they fly, less than adequate management oversight, and a less than aggressive safety program or no safety program at all. To decrease the 90 percent human error figure, the change must come from within the industry.

Mr. Chairman, that completes my prepared remarks, and I will be happy to respond to any questions you may have.

ALASKA'S UNIQUE NEEDS

Senator STEVENS. Thank you very much.

Pat, as you know, we have written this legislation to direct the FAA administrator to take into account Alaska's size and unique reliance on aviation before imposing new rules. We wonder, is that legislation being followed?

Mr. POE. I cannot cite a single situation in which a rule was totally disregarded regarding the State of Alaska. There are situations, and ongoing ones, where we look at ways to accomplish the intent of the rule in ways that are consistent with the environment that we have here in Alaska. I think those types of balanced approaches serve both causes well.

Senator STEVENS. I have been told there has been some attempt to consolidate this region with the region in Seattle. That would be automatically just putting us in a position where the Alaska region would not be subject to review by people who are familiar with our unique circumstances. Is that being pursued now, do you know?

Mr. POE. To my knowledge, it is not. We had one incident recently, and your office was involved, I believe, looking at the possibility of merging civil aviation security responsibilities between the two regions. That did not go forward, and as we speak I know of no other initiative.

Senator STEVENS. You have been here, as you said, just a little over a year now, and you came very highly recommended by the Administrator, and I would be interested to know if you have reached any conclusions as to what are the significant challenges that the industry faces here that it does not face outside. Too big a thing for 5 minutes?

Mr. POE. The range of issues here in the State of Alaska was something for which I was not fully prepared, to be very candid.

The thing that struck me the most about my time here in Alaska has been the sense of community among the aviators, and the different organizations, whether it is the Alaska Aviation Safety

Foundation, or the carriers, or the Airmen Association, or the Seaplane Association. We come together on an issue, and we come to point on trying to make a difference. That does not mean we always agree, but I think that that is one of the things that sets Alaska apart from any place I have been before.

One other thing is that the FAA people here have been here long enough that they know people who have fallen to the system, and so this is not just a professional responsibility, it is a personal commitment, and it is a great group of people.

Senator STEVENS. I am sure we agree with that.

REVILLA CORRIDOR EXEMPTION

Senator Murkowski has asked me to point out to you that for 20 years VFR traffic has been able to obtain a special VFR clearance exemption through the Revilla Corridor that maintains a steady flow of traffic into Ketchikan, and there is a decision been made not to renew the exemption. He would like to know, in the absence of the exemption, how is FAA going to prevent a backup of VFR traffic in and out of the Ketchikan Harbor during marginal weather conditions, and is FAA delaying a reestablishment of the exemption?

Mr. POE. When we began to evaluate the new routes that were being taken in and out, and we saw this probable conflict in traffic, we began to look to see if the exemption had already expired. It had not, and as a result it remains in effect today. In a way that was good fortune, because that gives us an opportunity to work with all of the community there to try and find a palatable solution. Right now, we think without extraordinary and extra care given to that situation, that it could run a safety risk, and so we want to find a way to remove that, so the work is ongoing.

Senator STEVENS. It is in effect right now?

Mr. POE. The exemption remains in effect I believe through January. Someone can confirm that for me.

Senator STEVENS. All right. I will tell him that.

KETCHIKAN FLIGHT SERVICE STATION

He also noted that in January 1999 there was a notice to the public that the Ketchikan flight service station hours would return to a 24-hour operating schedule following the recruitment of two new employees to fill the staffing losses. He said in February that the FAA reduced that flight service station hours to 14 hours and 15 minutes due to staffing losses, and that the new recruits had not been fully certified. What is going to be the schedule, as we go into the next quarter for the new century, for the flight service station? Will it return to the 24-hour schedule?

Mr. POE. It is our long-range intent that it do so. I do not have the answers to whether it will be effective within the first quarter of the next calendar year.

Part of the problem is the grade structure of that particular facility, and that promotion opportunities come and people leave as a result of that. The other thing is that with minimum staffing, when training and other losses occur, it requires that we adjust the operation not only of that facility, but on occasion others, and we look

for ways to do that that has the minimum impact to the public in terms of timing and in terms of the seasons of the year.

To the best of my knowledge, our intent is to return that to a 24-hour operation.

NEEDED INVESTMENTS AT ANCHORAGE INTERNATIONAL

Senator STEVENS. Mort, just a question or two for you. The transition of the Anchorage airport from an interim stop for passenger refueling to becoming, really one of the world's major cargo air hubs, as I think we have all noted that, and we have every indication that it is going to continue to grow. Are there investments that you think that we should be familiar with, steps we need to take to assure that that growth will be able to continue as scheduled and serve the air cargo and passenger markets? Is there anything further we should do in the Federal level to assist?

Mr. PLUMB. Senator, I think there is a few things we can do on the passenger and the cargo side, as I mentioned a little earlier. I think on the cargo side we need to take a close look at liberalizing the seventh and eighth freedoms, so we could capitalize on this globalization of aviation.

In that regard, I might just give a quick example. Let us just say hypothetical purposes, if we had a package that was on a bill of lading, we would like to have the ability to have that package carried by a carrier such as United Airline from New York to Anchorage and then be put on a carrier such as JAL and go from Anchorage on to Tokyo.

On the passenger side, we would like to see a pilot program that at least would give us an opportunity to show that it should not have any disadvantage in the marketplace, so Alaskans who are currently denied the opportunity to fly between Anchorage and New York could get on an international airline such as Korean Airlines and make that travel from Anchorage to New York as well as from New York back to Anchorage.

With regard to infrastructure, there are some things. We believe we are going to need some new taxiways to reduce airfield delays. There are certain support facilities we are going to need, possibly seamless access between some of the airparks, which would mean a tunnel under some of the runways to get between the north and the west side there. We certainly see a need for an efficient operations center, and emergency operations center, where we could consolidate in case we did have a mishap here.

Just recently we had an opportunity to exercise with the FBI on one of their exercises, and we both concluded that it would be advantageous to have a facility on the airport where we could operate from.

I think that would conclude my comments on that area.

Senator STEVENS. I just have a couple more comments, Don.

Mr. YOUNG. You are the chairman.

CAPSTONE

Senator STEVENS. You have all mentioned Capstone. How is it really coming along? Whoever would like to comment.

Mr. POE. Well, I am sure there are several opinions. Let me offer mine straight away. I think with the help of industry and with

your support, I think it has made remarkable progress, considering that it was almost exactly 12 months and a few days ago that the first appropriation was made, and we have done in-house testing, we have awarded the contract to train new pilots who began the equipage of aircraft that will start in January, we have a listing of 150 airplanes, we have funded the first 132. I think it is moving remarkably well, almost too well. We usually do not get this fortunate to move this fast.

I also think that the user community here is very strongly behind Capstone, and at the end of the day, that is what is going to make it work.

Senator STEVENS. When will we get the report that will indicate how fast we can go forward and make it State-wide?

Mr. POE. The University of Alaska Study is a 3-year study which was looking at the safety aspect of Capstone. In my judgment, the $6 million appropriation that we received this year, we will use part of that as a scene-setter to move beyond the Yukon delta. Whether that's into Juneau, or whether that is into Fairbanks, or whether that is into Anchorage, but it will be into a different area. I think this will be an incremental process, and it is somewhat dependent on future appropriations.

One of the main issues deals with spectrum, which is frequency. Right now we are using a frequency that belongs to the military and to go State-wide we are going to have to have one that the FAA owns and controls, and we are hoping to see that accomplished by January of next year, not of 2000 but 2001, as a part of the certification process, also as part of looking at ways to use this technology to actually sequence and separate aircraft.

Senator STEVENS. How is it viewed from the State's point of view, Paul?

Mr. BOWERS. The State absolutely supports Capstone, and would very much like to see it implemented State-wide, expanded State-wide. It cannot be soon enough.

NTSB'S VIEW OF SAFETY PROGRESS

Senator STEVENS. Jim, I am not sure everybody knows that you made the basic recommendations for following out so far on the safety process, 15 more closed-circuit weather surveillance cameras. That was one of your recommendations. We have got ten support, I think, for your mike-in-hand proposal so pilots can update runway conditions in flight.

I guess Capstone really was one of your ideas, as a matter of fact. At least my staff tells me they think it was your idea.

Mr. LABELLE. Well, actually it came out of the NTSB Alaska Safety study in 1995.

Senator STEVENS. Did it?

Mr. LABELLE. It was 23 recommendations, and I am pleased to say 21 of those 23 have been acceptable.

Senator STEVENS. What is next?

Mr. LABELLE. Well, we hope with the Alaska safety initiative to make some inroads into some of the issues with human factors, and with the help of my office and the FAA and the National Weather Service, we hope to get a coalition together and hopefully make some progress to perhaps reidentify some old problems and

make some new approaches to those old problems and deal with perhaps more effectively some of the human factors issues in Alaskan aviation, and in particular, pilot decisionmaking, management oversight, training for the Alaskan environment, and dealing with industry.

There has been some resistance. I have sensed, from industry to more regulation, and I concur. This is not a regulatory event, as we see it. Those involved with the Alaska safety initiative. We are looking at a nonregulatory approach, with industry buy-in, and I think it is absolutely crucial that we have their support, hear their views, get their perspective, and act as a facilitator to help them reduce the accident rate in Alaska.

Senator STEVENS. I spent the morning with the tourism industry, and it is really taking off, you know. There is no question about it.

One of the bright spots on our resource utilization screen is the increase in tourism, and substantial commitments there. The one dampener that could slow that down is the continued statistics we have had in recent months on aviation accidents and deaths. I really think the study that is underway is a very important one, to try and secure voluntary compliance with the type of procedures that would bring about the reduction in those statistics.

If we cannot get voluntary compliance, of course, in time your agencies, at least three of the four of you, will be forced to bring about mandatory compliance with procedures. I think we would be anxious to learn any way we can to help bring about that voluntary compliance. I think it will come about sooner, and it will be more effective, if it is voluntary.

Don.

INFRASTRUCTURE NEEDS

Mr. YOUNG. Thank you, Senator. I first want to thank the panel. I notice, Mr. Bowers, that you were making some suggestions and I was trying to write them down as fast as I could, about money could be better used on the runways, et cetera, than be used on another thing that Mr. Poe is proposing, or the FAA is proposing. Would you like to explain that, and what you think should be done?

Mr. BOWERS. It comes back to the infrastructure that we have got in Alaska. We really have an immature infrastructure. We do not have well-developed runways. In the rest of the country, in America, so to speak, we do have a fairly mature infrastructure.

Runways are well-developed, they are lighted, they are paved, taxiways—we are into multiple iterations of improvement at those facilities. The last things we need to do are improve safety areas, and that is, indeed, the national direction. That is the policy that the FAA follows on a Nation-wide basis, and that makes a lot of sense in the rest of the country.

In Alaska, however, any time we do any development on a runway, if we are doing any airfield infrastructure development, the FAA national policy is to marry that with implementing a full safety area at that airport. DOT absolutely supports having safety areas, but only after we have addressed the primary problem area, and that is having a decent runway. It makes no sense to me to

implement a full safety area at some of our airports when most of them are short, unlighted, rough surface.

The priority is, get the runway fixed first. After we have addressed that, then let us go back and do the refinements like improving the safety areas, keeping in mind that every landing and take-off uses the runway, but the safety area is only used if there is a problem, and typically that problem is a direct result of the operation from that rough, short, unlighted runway.

NATIONAL FAA POLICY

Mr. YOUNG. Mr. Poe, this is nothing personal, but are you having to follow the national direction of the FAA, or do you have the latitude to do what Mr. Bowers suggests?

Mr. POE. We have the latitude to work in the concept of a cost-benefit and look at the extent to which safety aprons are needed at airports in Alaska. That provides some flexibility. However, we consider the safety apron part of the airport runway. We consider one, if you will, one formula for safety.

I can understand, when Paul indicates maybe we should pick priorities and surface the runway before we consider the accompanying safety implications.

Mr. YOUNG. Well, I am just going to suggest, Mr. Bowers—I have landed on a lot of those airfields, and I agree with you 100 percent. I do not necessarily agree with you, Mr. Poe. I want you to know that right now.

Mr. POE. I understand that.

Mr. YOUNG. But I am hoping the industry itself will have some comments, and I hope you are not locked into concrete with the idea that you may not be totally right on this issue. There may be another side of the coin to avoid—we are supposed to be here for safety. We are not supposed to be here for turf acquisition. That is what I really want to stress.

HUMAN FACTORS

Mr. LaBelle, you have mentioned that 90 percent of the accidents were related to human factor, and 10 percent were related to aircraft and regulations.

Mr. LABELLE. I am sorry——

Mr. YOUNG. 10 percent would be aircraft, 90 percent——

Mr. LABELLE. Well, the mechanical issues, or environmental issues. Essentially we look at three basic elements in any accident investigation. That is the pilot, the machine, and the environment they fly in.

Mr. YOUNG. So you are finding 90 percent, usually pilot?

Mr. LABELLE. That is correct.

Mr. YOUNG. With all the new ideas and thoughts in weather reporting, automated weather reporting, all the other things that have been recommended by Senator Stevens, we still have that factor of 90 percent, do we not?

Mr. LABELLE. We still have the factor, but a lot of the infrastructure relating to Alaska safety study, the 1995 Alaska safety study, is just now coming to fruition, so hopefully Capstone and other initiatives down the road will have some impact.

But again, the operational issues are still, even Nation-wide outside of Alaska they are still paramount. Those are still the principal precipitators of accident—the human element, and the more we can do, I believe, in Alaska to address the unwarranted risk-taking, the so-called bush pilot syndrome, through training, through awareness, and strong safety programs within the industry, I think we can make an impact on the accidents in Alaska.

Mr. YOUNG. The hand mike, does that basically replace the—you see, I was never a great supporter of the automated weather reporting. You know, I have flown enough in the State to not really believe in it. Now, will that take and make up with the lack of good weather reporting, with the hand mike report?

Mr. LABELLE. I think it will be an adjunct to it. I do not think it is—there is now automated weather reporting sites scattered throughout the State, and there is going to be more. I just had the opportunity to talk to the director of the National Weather Service, Richard Pesotti, and he indicated that they are going to be working with the mike-in-hand and some training for the National Weather Service individuals to help implement that, which is good, which is very proactive.

Mr. YOUNG. Now, I just came from an area that has an automatic weather reporting system. It tracks weather, wind-wise, cloud-wise, wind coverage, et cetera, just very, very good. Why can we not put that in the airplane itself? It is just not practical financially?

Mr. LABELLE. I really cannot respond to that. I suspect it would be financially prohibitive. Perhaps Capstone—the Capstone initiative has some of that inherent in it with the weather display and weather mapping and some other issues, and some of the downlinks that they have from satellite data, so that is coming. That is available at least in part in the Capstone initiative.

OLDER AIRCRAFT

Mr. YOUNG. Mr. Poe, you know I have had some questions—I will not bring them up today—about a couple of other subjects like airplane maintenance and certain things that I do not think are necessary, old planes being proposed in the Lower 48 that now they say are outdated. No plane has been shown where it has collapsed or has had metal fatigue. It is pilot error.

Alaskan industry itself, as you are well aware of, is dependant upon many of our old vintage aircraft. That is what they were built for, and as long as they are inspected, and I think that is your responsibility, and as long as they are, you know, studied for stress, engine maintenance is kept up, and everything is done, there is no reason physically why an aircraft cannot run forever, and one of my proud moments in Alaska is, I see planes flying that I see standing in the Smithsonian Institute, and I have flown on most of those.

So I think there has got to be a working relationship, and I am glad to hear you say that that has occurred, or is occurring. I want to continue that, because as I mentioned in my opening statement, my goal is to make sure it is safe, but make it available, and make sure that the competition exists, and make sure that my consumers are able to get from A to B without having to pay an arm and a

leg. Every time we have to do something within the insurance area, or addition, et cetera, our constituents end up paying for it, and very frankly I do not think it creates that much more safety.

So with that, I want to thank the panel. Mr. Plumb, you have a great operation out there. Keep it going. One of my proud moments, as the Senator has mentioned, is the growth of that international airport, and we just hope that it continues, and we employ people, and we get jobs and get people off the airplane and on the airplane, and achieve the goal of good transportation.

Thank you, Senator.

Senator STEVENS. Thank you. On that aging aircraft issue, I talked to FAA Administrator Garvey on that issue. You may know about that, Pat. She told me she is aware of the legislation I mentioned, specifically the law that requires the FAA to consider Alaska's unique environment and its dependance on aviation before imposing any new rules or regulations, and she assures me that Alaska's concerns would be addressed in the final rule.

That has not been made public yet how it will be done, but we are going to monitor that very closely, Don. I am told now that that will be almost a year before that final rule is published, so we still have time to work on that.

Mr. YOUNG. Which reminds me, Senator, Mr. Poe, on that Ketchikan deal, has there been any problem with the existing exemption, the one that you brought up, of the corridor?

Mr. POE. Yes. The problem is, as traffic has intensified in that area, that we are no longer comfortable with the way the arrangement exists, and so——

Mr. YOUNG. May I ask this question: if you change it, what is the alternative, unless there is just less flights?

Mr. POE. Well, we have people looking into what the best alternative is. Our intent is not to reduce the number of flights. Our intent is to increase the level of safety, and that is what we are studying as we speak.

Senator STEVENS. We do thank you very much for taking the time to be with us. We do, by the way, have staff on the committee representing other Senators here today. That is important impact to have on our committee by the testimony we have, and far greater than if we had waited to have just one of you appear in a hearing in Washington, so I thank you for taking the time.

Our next group is what we call the user group panel. Dick Harding, president of PenAir, representing the Air Carriers Association, Tom Wardleigh, president of the Alaska Aviation Safety Foundation, and ALPA representative Felix Maguire, the president of the Alaska Airmen's Association, and Ken Acton, an aviation consultant.

I have just been informed, to my sadness, that because of a council meeting we must evacuate the building before 4:30, but we still have plenty of time, but I just want people to know there is a time constraint on us in order that the area may be cleaned and made presentable for the assembly.

For no other reason that that is the way it appears on the schedule I was given, why don't we just start with you, Dick.

STATEMENT OF RICHARD HARDING

Mr. HARDING. Good afternoon, Senator Stevens, Congressman Young, members of the committee, members of the public. My name is Richard Harding, and I am speaking to you as past president of the Alaska Air Carriers Association and as general manager of PenAir. I have been a pilot all my life, and I still occasionally fly the line. I will talk about the age 60 rule, but before that I would like to discuss a couple of other aviation safety issues.

The State of Alaska consistently has a significantly higher accident rate than the rest of the country. The Federal Government has invested millions of dollars in the FAA funding through new regulations and other programs. The sad reality is, the FAA has only minimally improved the safety record in Alaska. The accident rate today is the same as it was 15 years ago.

Over the past 15 years, the FAA has implemented major regulatory changes, mandatory installation of GPWS, CVR, drug and alcohol testing, the commuter rule, and they have proposed now new regulations on repair stations and aging aircraft. The cumulative cost to Alaska-based carriers is in the millions of dollars. Despite all of these mandatory regulatory compliance items, the accident record in Alaska has not changed.

PenAir took an inventory of the airports we serve, 2 years ago, and compared the accident and incident data relating to substandard airports. We made a difficult business decision to discontinue operations at several locations. This left a few small communities without options for air transportation. We did it because we realized the risk operating into those unimproved airports was not worth a potential accident.

Recently, the airlines and other user groups met with State and Federal agencies to draft a 5-year plan of infrastructure projects, system changes and recommendations to improve safety in Alaska. Seven major issues were a minimum of 3,300 feet of runway length with lights, and minimum shelter for the passengers, all-weather approach and landing capability, availability of weather information, communication navigation systems, weather cameras, and support of Capstone, and very important, a stable aviation workforce.

The Aging Aircraft Safety Act mandated the FAA to implement rules requiring engineering data that would forecast structural failure in aging aircraft and further apply that data to inspection programs. The Alaska air carriers and PenAir both support the regulations that improve airplane safety. Implementation of this regulation, however, will not provide a level of safety that is measurably better than provided by more feasible means. If the rule becomes regulatory, it will have a devastating effect on aviation infrastructure in Alaska.

AGE 60 RULE

The current proposed legislation by Senator Frank Murkowski to extend the retirement age to 65 is a rule we believe would benefit nearly everyone. The flying public would benefit by the greater experience level on the flight deck, pilots would benefit from their ability to select their time of retirement, airlines would reap bene-

fits of a lower pilot turnover rate, and retention of their most experienced pilots.

This year, PenAir will lose two pilots, including me, directly related to the age 60 rule. Indirectly, our company has an annual turnover rate of about 25 percent within our pilot ranks. However, the loss would be less if the major carriers were not experiencing a rash of vacancies as a result of this forced retirement. The military would also benefit by less pilot turnovers in the airline industry.

Experience is still the most important criteria for hiring pilots at PenAir. We operate in Alaska, and we have no choice but to fly in the most demanding conditions and under onerous geographical challenges.

When I first came to Alaska to fly for PenAir I had 2,000 hours of flight time. All of my previous experience consisted of training. I was either getting trained, or as a flight instructor, training others. I could ace any written test, pass any flight test with ease. However my first year of flying in Alaska was an education in itself. I found myself saying many times, boy, I will never do that again. After hundreds of never-again mental notes, I had a year under my belt, and a little experience.

I have been fortunate enough to have flown in Alaska for 30 years, and accumulated over 30,000 accident-free hours. Many pilots are not as lucky. A study by the State labor economist confirms my personal experience. Her 1997 study confirmed that pilots with less than a year experience contributed the most pilot fatalities on the job.

The general health of Americans has improved over the last 40 years, and most people are working to an older age. The median age of the Nation's workforce has risen from 28 in 1970 to 39 today. Even Social Security is raising the retirement age to 67.

Most people I know would prefer to have a little gray hair in the front seat, particularly when the flying conditions are not ideal. Maybe they say that to spare my feelings, but I do not think so, because I feel the same way.

In conclusion, I sincerely hope the age 60 rule is amended to 65. I fully believe it would be beneficial to everyone, and would help reduce the pilot shortage we face today.

Aviation in Alaska is an integral part of the daily economic and social fabric of our State. Ever more restrictive and expensive operational equipment requirements force carriers to make business decisions that are not market-driven, but are regulatory compliance-based.

The FAA continues to force carriers that have reached a financial and operational threshold of using larger turbine-powered equipment to pay a compliance penalty to operate that equipment. At the same time, operators of smaller, reciprocating engine equipment do not have the same regulatory compliance cost structure. The cumulative effect is to drive operators toward increased utilization of old technology, while exposing the traveling public to a greater risk.

PREPARED STATEMENT

The industry needs relief from well-meaning but misdirected regulatory proposals that accomplish little, or are of substantial cost. We do not expect to undo the mistakes like the commuter rule, but we would like to see one-size-fits-all regulations addressed to meet Alaska needs. You, Senator Stevens, provided the FAA a vehicle with recent regulation that allows the Administrator to consider Alaska's unique requirements. The Administrator still needs your guidance on how to apply this regulation. We also need your help in bringing Alaska into the 21st Century. We will never have the highway system provided to the Americans in the Lower 48, but Alaskans deserve an aviation infrastructure equivalent to that road system, one that provides the same safe, reliable transportation system as our fellow Americans.

And thank you for letting me speak today.

[The statement follows:]

PREPARED STATEMENT OF RICHARD HARDING

ALASKA AVIATION ISSUES FOR THE 21ST CENTURY

Good afternoon Senator Stevens, members of the committee and members of the public. Thank you for providing this opportunity to inform you of critical issues affecting commercial aviation today. My name is Richard Harding and I'm speaking to you as past-president of the Alaska Air Carriers Association (AACA) and as General Manager of PenAir, an Anchorage based company with 45 aircraft, 98 pilots and 425 employees. I have been a pilot all my life and have accumulated 30,000 accident free hours over 30 years in the industry. At times I still fly the line, although my commercial flying will come to an abrupt halt in 5 days because of an unjustified and antiquated rule. The FAA rule does not consider the value of my lifetime experience or good health. I'll talk more about the Age 60 rule in depth later. But, before that, I'd like to discuss aviation safety and Alaska's accident statistics, recent regulatory initiatives, the Commuter Rule, the condition of Alaska's airports and Aging Aircraft.

SAFETY FIRST

First, let's talk safety. The State of Alaska consistently has a significantly higher accident rate than the rest of the country and, anybody remotely involved with aviation in Alaska is acutely aware of that fact. The Federal government has invested millions of dollars into FAA funding through new regulations, increased oversight, and initiatives including a new approach to "dictating" and how the industry will operate "more safely." We've seen times of heavy-handed enforcement practices by the agency and have experienced the pendulum swinging the opposite direction to accommodate and work with carriers. The sad reality is what the FAA has done has only minimally improved the safety record in Alaska; and the safety rate today is the same as it was 15 years ago.

REGULATORY INITIATIVES

Over the past 15 years, the FAA has implemented the following major regulatory changes: (1) mandatory installation of GPWS on turbine-powered aircraft with 10 or more seats; (2) mandatory installation of TCAS on turbine-powered aircraft; (3) elimination of the allowance of 15 minutes flight to VFR conditions; (4) Part 135 flight crewmember training to Part 121 training program standards; (5) drug, and alcohol testing and training for aviation vendors' employees; (6) equipment installation requirements for single-engine IFR operations; (7) "commuter rule" conversion to Part 121 operations for single-engine aircraft with 10 or more passenger seats; (8) NPRM 99–09 Repair Stations, and (9) NPRM 99–02 Aging Aircraft. The cumulative costs to Alaska based air carriers has been in the millions of dollars. Despite all of these mandatory regulatory compliance items, the safety record in Alaska has not changed significantly.

THE COMMUTER RULE

In 1995, we felt the biggest and most onerous rule to ever hit the industry was the "Commuter Rule." It has been nearly 5 years since its effective date with little or no change in the industry's safety record—while there has been a documented decline in service in parts of Alaska. Where 10–19 passenger twin turboprops with two pilots in the cockpit were once used, they have now been reduced to 9 passenger seats with a single pilot. The results for those who completed the changeover are higher operating costs, higher ticket fares, and those who didn't change over have more exposure to risk through increased numbers of takeoffs and landings. Certainly, the move back in time to older, single-engine piston-powered aircraft vs. the more reliable and safer twin and single engine turboprops is not progress.

In 1995, the FAA passed a rule that required Part 135 10–19 seat aircraft to transition into more restrictive and expensive Part 121 operation rules. Only two companies made a successful transition into Part 121, PenAir and Frontier Flying Service. Three others that made the transition, Taquan Air Service (Air One), SouthCentral Air and Yute Air have either gone out of business or into bankruptcy. In effect, the rule took many of the newer, more technically advanced aircraft out of operation and literally set Alaska aviation back 25 years.

FUNDING

We have experienced a slow improvement in runway conditions over the years because of an increased investment of federal dollars. We need to increase the number of dollars to get airports up to minimum service levels. Investments in Alaska's aviation infrastructure are such a slow and arduous process because of the bureaucratic process of the FAA, the value of much needed improvements isn't something we can count on in the near future, with the exception of Capstone.

We all understand the different operating culture and infrastructure of Alaska transportation as compared with the Lower 48. Most of the Alaskan commuter fleet is composed of single-engine aircraft flying VFR. Aviation takes the place of a road system infrastructure throughout most of Alaska's bush, and it always will. The cost of building and maintaining a half-mile of airport is much less expensive than building and maintaining roads between villages.

AIRPORTS

Speaking of airports, two years ago, PenAir took inventory of the airports we served and compared accident and incident data relating to substandard airports. We made a difficult business decision to discontinue operations into several destinations. This left a few small communities without options for air transportation. We did it because we realized the risk operating into those unimproved airports wasn't worth the potential costs involved with an accident.

The conditions at our rural airports are only one of several topics I would like to discuss today. All of the subjects, however, address safety and offer recommendations for reducing accidents in Alaska.

Recently, the airlines and other user groups met with state and federal agencies to draft a five-year plan of infrastructure projects, system changes and recommendations to improve safety in Alaska. The six major recommendations of the "Alaska Aviation Coordination Council" were; (1) publicly owned airports, a minimum of 3,300 feet in length with runway lights and minimum shelter for passengers; (2) all weather approach and landing capability; (3) availability of weather information; (4) communication and navigation systems; (5) weather cameras; and (6) very importantly, stable aviation work force. The estimated cost to bring Alaska's airport system up to these minimums statewide was estimated to be $265 million over the next 5 years.

AGING AIRCRAFT

Congress initiated the Aging Aircraft Safety Act of 1991 (AASA) in reaction to an accident involving an older Boeing 737 in Hawaii. The Act mandated the FAA implement rules requiring engineering data that would forecast structural failure in aging aircraft and further apply that data to inspection programs. The manufacturers of the types of aircraft involved in the accident that precipitated this Act of Congress have already addressed the aging aircraft issue. Of the remaining light twin-engine aircraft used in commuter service, a disproportionate amount of these aircraft are being operated in Alaska.

Operators in Alaska, including PenAir, rely heavily on light twin-engine aircraft to provide the aviation infrastructure necessary to serve Alaska's small communities that are totally dependent upon air transportation. Implementation of this rule

would eliminate light twins and force carriers (those that survive the economic loss of their light twins) to revert to single-engine aircraft. Most single-engine aircraft in Alaska are older than the light twins, and most cannot fly IFR, which will in turn create a less safe environment for the public. Please note that accident statistics show that in Alaska, single-engines have six times more accidents than twin-engine aircraft.

In Alaska, the light twin engine aircraft we fly are primarily the Piper Navajo, and the Cessna 402. Neither has been manufactured since 1983. It is not practical or economically feasible for the manufacturer to provide the design data necessary for engineers to create the information required to establish damage-tolerance-based inspections and procedures. Under the current NPRM, expanded inspection procedures apply damage-tolerance inspection criteria. Considering that this NPRM is directed toward aircraft designed under FAR 3 and FAR 23, it effectively requires re-engineering of the airframes.

In addition to the lack of design information availability, the National Air Transportation Association (NATA) estimated the cost per air carrier to be approximately one million dollars per aircraft type. The only result of the new regulation will be the elimination of light twin aircraft in Alaska, not increase safety.

The AACA and PenAir both support regulations that improve airplane safety. Implementation of this regulation, however, will not provide a level of safety that is measurably better than provided by other more feasible means. The Aging Aircraft Safety Act of 1991 did not mandate the FAA require operators to re-engineer entire fleets of operational aircraft, and the Act did not mandate the FAA to ground them. There is no mention in the AASA of damage-tolerant inspection criteria. There are other measures available to ensure the continued airworthiness of aging aircraft for the remainder of practical service life, such as implementation of additional age sensitive maintenance procedures requiring progressive inspection programs, tailored to each affected type, and incorporation for planned obsolescence provisions.

Damage tolerance inspection procedures are inappropriate for retrofit inspection programs. There is no need to expand the scope and detail of inspection criteria for PenAir. To place this burden on each air carrier to develop its own program, including damage tolerant inspection criteria for each type of aircraft the air carrier intends to operate in the future, is not practical nor economically viable. The proposed aging aircraft regulations, as currently written, are unnecessary and cumbersome.

If the rule becomes regulatory, it will have a devastating effect on the aviation infrastructure in Alaska. The most critical safety concern with older aircraft fleets, and the most immediate concern, is the individual airplane's history of damage, repair maintenance and alterations. A progressive inspection plan such as Approved Airworthiness Inspection Program, designed by certification engineers and airworthiness inspectors incorporating increasingly stringent requirements as the aircraft ages, would identify fatigue problems before they affect safety.

Grounding fleets of aircraft in Alaska will enhance neither safety nor serve the public interest. The regulation needs to be modified to allow reasonable inspection programs an opportunity to address the aging aircraft issue.

AGE 60 RULE

The Age 60 Rule is not a new idea, as the very first FAA Administrator, Elwood Quesada, introduced it during his term and on March 15, 1950 it took effect requiring mandatory retirement for pilots as they reach age 60 even though neither scientific studies and/or medical documentation ever supported this rule. Overwhelming opposition was presented and only after the rule had taken effect was a study undertaken to examine critical issues. The study was performed by the FAA in the early 60's but later abandoned by the agency before final results were made public. In 1969, an independent report was commissioned and completed, but again results were never made public.

In 1979, a Navy study of pilots and their long-term health histories was performed on one thousand aviators. The FAA reviewed the study but concluded it failed to provide an adequate basis for revising the Age Sixty Rule.

Congress became interested in the issue and directed the National Institute of Health (NIH) to do research on the viability of the rule and they were tasked with substantiating the reasons pilots were retired at sixty. A panel was convened outside the authority of the FAA and that panel "expressed doubts about the need for all pilots to step aside at age sixty." Subsequently, the panel recommended initiation of a comprehensive study focusing on selected captains over sixty.

After reviewing the NIH report, the FAA issued two notices of proposed rulemaking (NPRMs). First, the agency suggested extending the Age Sixty Rule to include flight engineers and the second proposed a test program for selected pilots

over sixty. This mirrored exactly what the NIH had suggested. Two years later the furor died down and the FAA quietly dropped the proposal.

The current proposed legislation by Senator Frank Murkowski to extend the retirement age to 65 is a rule we believe would benefit nearly everyone. The flying public would benefit by the greater experience level on the flight deck. Pilots would benefit from their ability to select their time of retirement. The airlines would reap benefits by experiencing a lower pilot turnover rate and retention of the most experienced pilots in the system.

Of course, no issue is without opposition. Those that wouldn't benefit from a rule change are the young pilots on the fast track to the left seat. Certainly the rule would delay them back, which in actuality would provide a quiet benefit by allowing them more time to gain valuable experience.

This year PenAir will lose two pilots, including myself, directly related to the Age Sixty Rule. Indirectly, our company has an annual turnover of about 25 percent within our pilot ranks. However, the loss would be less if the major carrier's weren't experiencing a rash of vacancies as a result of this forced retirement. The military would also benefit by less pilot turnovers in the airline industry.

Last year, for the first time ever, we lost a 48-year old pilot to the majors! And, I'm amazed to hear some carriers are now hiring pilots over 50. On the opposite end of the spectrum some majors are now hiring pilots with less than one thousand hours. In contrast, at PenAir, we won't even consider employing pilots with such a low experience level to fly our five-passenger airplanes. We used to give hiring preference to pilots without a four-year college degree because we knew the airlines weren't interested in them, but that is not true anymore.

Experience is still the most important criteria in hiring pilots at PenAir. We operate in Alaska and have no choice but to fly in the most demanding conditions and onerous geographical challenges. On an average day we have "poor" weather reporting and operate within strict limitations because most airports have only VFR capability and many of the airports we depend upon have sub-standard runways.

When I first came to Alaska to fly for PenAir, I had 2,000 hours listed on my employment application. All of my previous experience consisted of training. I was either getting trained or training others as a flight instructor. I could ace any written test and pass any flight test with ease. However, my first year flying in Alaska was an education in itself. I found myself saying many times, "Boy, I'll never do that again." After hundreds of "I'll never do that again" mental notes, I had a year under my belt and a little experience. I have been fortunate to have flown in Alaska for thirty years and accumulate over 30,000 accident free hours. Many pilots aren't as lucky. A study by state labor economist Taktha Lukshin confirms my personal experience. Her 1997 study confirmed that pilots with less than one year experience contributed to most of the pilot fatalities on the job.

The general health of Americans has improved over the last forty years and most people are working to an older age. The median age of the nation's workforce has risen from 28 in 1970 to 39 today. Even social security is raising the retirement age to 67.

Most people I know would prefer to have a little gray hair in the front seat, particularly when the flying conditions aren't ideal. Maybe they say that to spare my feelings, but I don't think so. I feel the same way.

CONCLUSION

I sincerely hope the Age 60 Rule is amended to Age 65. I fully believe it would be beneficial to everyone, whether they know it or not, and would help reduce the pilot shortage we face today. Aviation in Alaska is an integral part of the daily economic and social fabric of our state. Evermore restrictive and expensive operational and equipment requirements force air carriers to make business decisions that are not market-driven, but are regulatory compliance based. The FAA continues to force air carriers that have reached the financial and operational threshold of using larger, turbine-powered equipment to pay a "compliance penalty" to operate that equipment. At the same time, operators of smaller, reciprocating-engine equipment do not have the same regulatory-compliance cost structure. The cumulative effect is to drive operators toward increased utilization of old technology while exposing the traveling public to greater risk.

The industry needs relief from well meaning but misdirected regulatory proposals that accomplish little or nothing but add substantial costs. We don't expect to undue mistakes like the commuter rule but we would like to see "one size fits all," regulations addressed to meet Alaskan needs. You, Senator Stevens, provided the FAA a vehicle, with recent regulation, that allows the Administrator to consider Alaska's

unique requirements. The Administrator still needs your guidance on how to apply this regulation.

We also need your help to bring Alaska aviation into the 21st century. We will never have the highway system provided to Americans in the lower 48; but, Alaskans deserve an aviation infrastructure equivalent to that road system that provides the same safe, reliable transportation as their fellow Americans.

Senator STEVENS. Thank you very much. We appreciate it, Dick. Tom.

STATEMENT OF TOM WARDLEIGH

Mr. WARDLEIGH. Thank you, Senator Stevens and Mr. Young. It is a pleasure to greet you here. I just returned from New Zealand. I did not have time to prepare a written dissertation, but the one thing I noticed is that user fees were instituted in New Zealand in 1987, with general aviation exempt from those fees.

However, in January 1999, those user fees were applied to general aviation in that country. It is my personal observation, after visiting several airports there, that Mort Plumb hosts more general aviation at the Lake Hood airstrip than the nation of New Zealand has. I commend you for protecting us so far from user fees and other things that would just put the lid on general aviation.

Addressing safety directly, Alaska has a unique mix of topography and weather that makes it extraordinarily demanding to serve airports like Dutch Harbor and St. George Island, St. Paul Island, Ketchikan, Juneau, Wrangell, Petersburg, and so forth. Retention of experienced pilots is going to be a critical factor in improving any safety record in the Yukon Delta, Kuskokwim area, anywhere that we have been consistently going into the mining business with aluminum bits, which just does not work.

I believe that through your efforts, the University of Alaska has a fine plant facility. They are capable of training resident Alaskans, people born and raised here, people who want to live in the rural communities, and serve those communities. One of our apparent problems is a lack of gainful employment opportunity in the small communities of rural Alaska. Being a professional pilot, even a ticket agent or a dispatcher or a weather observer is certainly an attractive alternative to not doing any of those tasks.

I urge that politically we get together with the Bureau of Indian Affairs, with the unemployment people and the Federal Government, any source of funds that will enable us to bring young people in from graduating in rural high schools, train them to useful careers in aviation at the University of Alaska, perhaps protect them a little bit from the city environment when they first get here, enable them to have a productive life in aviation, and become a PenAir pilot working for Dick, and stay at PenAir, rather than going to the worldwide air carriers or other, more lucrative jobs.

I believe some stability and some lesser accident rate could improve the insurance rates, make the companies more profitable, and make the people in the communities a little bit more comfortable when they ride in a small airplane from place to place, and when their athletic teams go from village to village to just play basketball.

Mort mentioned a problem with seaplane adequacy here in the Anchorage area. There is a possible opportunity for the State, and with some political influence, the railroad. The Alaska railroad had

a large gravel pit at Eklutna, Alaska. One of the local construction firms even created a proposed plan to make a good, safe, seaplane base in that old gravel pit.

Unfortunately, it had just been Eklutna Village Corporation. They had a vote whether to support the accommodation of seaplanes or to keep it as it is, and with the population of 27, the vote was 14 to 13 to not have a seaplane base there.

It is my feeling that if an attractive land exchange program could be created, perhaps those people would exchange that land, where it could become very convenient. It is in a very sheltered wind area, and would in fact make a fine reliever seaplane base for the communities of Eagle River and Palma, and Anchorage.

We are concerned not so much for safety, but for utilization of the air space over national parks, refuges, and other Federal domain in the State of Alaska. We notice, for instance, that the park service employees use gravel bars and rudimentary strips, but they discourage the general public from using them.

At the present time, we have got a tentative agreement with the park service at McKinley to continue the McKinley air strip in service for the foreseeable future, or, quote, until a suitable replacement is identified. That air strip was used recently for medevacs and service to people in need, as well as just the tourist population. We feel that access to that park should not be restricted to just those people who are able to walk and who have the time to walk. There are handicapped folk who can see Mount McKinley in no other way than getting in an airplane and viewing that majestic piece of real estate. We hope that you can intervene with that.

We notice that the insurance availability can be a business deterrent. Right now, there is considerable flux in the availability of commercial insurance for aviation purposes. I do not exactly know how the Congress can fit in that, but hopefully there can be found a way to make affordable insurance available land, of course, the key to that is stop having accidents. The key in my view to stop having accidents is have more proficient, skilled pilots and more conservative management who will tell them, you may not take that flight under certain conditions.

We recognize that the FAA is basically air carrier oriented, because the air carriers serve the huge bulk of the national population, but we urge that it stay close to the administration, to Mrs. Garvey and her successors, so that Alaska's unique needs can be met. One size did not fit Alaska any better than a sharpei dog's coat, and not many of them run in the Iditerod.

I would suggest that our Anchorage population reading the letters to the editor recently has lost sight of the fact that Anchorage International is one of the most unique and beneficial airport sites in the whole world, to my knowledge. We have three flight paths from those runways that go over water. They do not imperil people's houses, residencies. They do not make a lot of noise.

The thought of moving a large airport into the Susitna Valley would preempt a great deal of livable land by virtue of the noise and the approach and departure paths. I believe Mr. Plumb has a tremendous challenge to develop that beautiful airport site successfully and skillfully, and sell it to the population of Anchorage, who

benefit by the fact that 747's full of fuel oil do not fly right over the middle of town on take-off most of the time.

I join you in the issues already mentioned about aging aircraft. We still have a 1929 Traveler in commercial service here in Alaska. It seems to be doing fine. I would hope that the FAA's enforcement program—and be reminded of the original language of the enabling act that said, and to regulate in the interest of safety. We get the feeling that some of the regulation goes on just because the law is the law is the law. We would like to have some direction to their legal department, and to their enforcement people. Focus it on safety. Make the regulation in the interest of safety come to life.

And thank you for this opportunity.

Senator STEVENS. Thanks, Tom. Glad you got back in time.

Felix Maguire.

STATEMENT OF FELIX MAGUIRE

Mr. MAGUIRE. Senator Stevens and Congressman Young, ladies and gentlemen, it is an honor to be able to speak before you this afternoon.

I am president of an association that is a State-wide association that is 1,200 members scattered throughout the State with regional directors in Fairbanks, Juneau, Kenai, and Bethel, so we keep an eye out on most things around the State for general aviation.

Personally, I have been the chief pilot for AT&T ALASCOM for the last 20 years, and I have flown into most villages throughout the State, and I do so on a regular basis, so I am very familiar with the structure of the State.

There are six points I wanted to mention this afternoon. Number 1 is that the 5-year strategic plan that has already been mentioned, we are very supportive of that. It came out of an initiative when people gathered together and had communicated well and shared well their vision and their feelings for the future, and there is a good sense of vision in that strategic plan.

The only thing that I personally would disagree with is that it asked for runways of 3,300 feet, and I think we should go for 4,000. The reason I say that is because, when I started flying here 25 years ago, and in the first 10 years I flew a King Air, and I kind of was the first one to fly a King Air around for a while, and then the King Air started to catch on and we started moving from piston airplanes to turboprops, and by the end of my 10 years of flying that King Air and we sold it and replaced it with a Cessna Citation, we noticed other people flying King Air's, and even the airlines were flying the Beech 1900's, which is the stretch version of the King Air.

I have flown the Citation now into gravel strips all over the State, and even took Citation into Chungnak, which kind of surprised them that a jet would get in there, and the movement is that the older airplanes are not being replaced. They are not making any more Navajos, so gradually we are going to move to turboprops, and then we are going to move to jets down the line, and if we are looking in the next century, then we have to look to providing runways that are capable of taking those airplanes.

I was able to do most of my stuff on the part 91 and land on runways that are 3,000 feet, but if Dick Harding is to use the Citation

in and out of a strip he will have to have 4,000 feet to meet the requirements of part 121.

The next issue I mention is whether we had a system here in Alaska that was working very, very well, called LABS, and the FAA provided that system, and we could get weather on that, and it was available very cheaply on a commercial basis. It was not Y2K-compatible, so it was taken away and replaced with a system called DAWN. The only problem with DAWN is that DAWN is an internal system. The FAA will not let the public use that. They have this tremendous system, but they use it for themselves only, and I do not see the rationale in the FAA gathering information from the National Weather Service and then hoarding it to themselves and not letting it available to the public. If this system could be put on the Internet, then we could all have this information, even if we have to pay for it.

The commercial systems that are out there at the moment are not as good as DAWN. They are not as good as the LABS situation. They do not allow you to have collectives. If you want the weather, if you are going from here to King Salmon, you have to get the weather for Barrow and every other place, so it is a waste of paper and time, and is not as efficient as the LABS system was.

The cameras are a great contribution to the State, and we thank the Senator for his getting the first appropriations to try out the first cameras, and it took us a while to get the FAA to do that, but now that we have got them, everybody sees the advantage of having cameras throughout the State, and we look forward to having a camera in every pass as well as at some of the remote locations where we do not have a human being to report the weather.

Flight service stations are still a concern. You have already mentioned the fact that the flight service station in Ketchikan is short-staffed, and it has to do, at that post has partially to do with the fact that the flight service station personnel are grade 10's. Those at the FASS are grade 12's, and so everybody who is in the flight service station wants to move to an FASS and get extra pay.

In the meantime, with the shortage, an FASS person comes to Ketchikan to fill in. They are not only getting two grades higher in pay, they are also getting per diem, and that destroys the morale of the flight service station, so people want to leave the flight service stations and go away.

There is no training facility in Oklahoma for flight service stations as they are today. The equipment is outmoded, and for some reason the FAA is adamant that training has to take place in Oklahoma and not on-site. If they would train people on-site in Ketchikan and Sitka and Dillingham and Barrow, then we would not have the shortage. We could train local people to do that, and we would be able to employ perhaps the Native residents to work at the flight service stations.

Maintenance is a concern of navigation facilities throughout the State. The FAA in the last month has decided to centralize maintenance in Anchorage, so all the people who maintain things out of Juneau or Ketchikan, Barrow and so forth, are all going to be centralized in Anchorage.

I work for a corporation that tried the same thing. AT&T brought all their technicians in from the bush and put them all here in An-

chorage, and found themselves in a real bind when something went out, such as ADAK went off the air 3 months ago, and the only way to get somebody out there—you cannot fly them out commercially because there is no weather available.

You cannot charter an airplane because the charter cannot go without weather available. The only thing they could do was, they fortunately had a corporate airplane that flew under part 91 that could go out and take a look-see.

The FAA does not have a part 91 airplane in the State of Alaska, and we know how difficult it is to get into Juneau on most days, and if we have to get a technician down to Hoonah or to Haines to fix a beacon, then the difficulty of getting them from here to Juneau is the first step, and then to get them the other way. So I think it would be a retrograde step and a depreciating of service if FAA centralizes the maintenance in Anchorage.

The Capstone project is a great project. We support that, but we see that even though it is a 3-year experiment within 3 years, if it is a total success, it will take at least 20 years before this is implemented Nation-wide. In the meantime, Bethel is a bad spot without radar, and each year we encourage the FAA to put radar in Bethel since 1987.

They have approved it each year, and each time it comes round to appropriations it gets killed, because the appropriation is based on the number of passengers who move through the terminal. The number of passengers moved through Bethel could be all put on one 747, or two 747's, in one day, and that is inadequate to justify the place to have radar.

If we counted airplanes instead of passengers, the movement of aircraft would justify the radar, and I think an exemption should be made on how we justify the radar in Bethel and go ahead and put it in. The radar could be in and up and working in 2 years, whereas the Capstone project equipment will not be working for at least 20.

Senator STEVENS. 20?

Mr. MAGUIRE. I would think, by the time we get around the whole Nation, everything that would have to be done to use this as a national project. This is an experiment that is going on, the Capstone, and it is going to be very successful, but by the time you get every aircraft equipped, and every center equipped with the radar, the ADSB to read this stuff, and you need radars around and facilities to pick up the ADSB, it is going to take a longtime to implement the whole thing as a national program, and the way the FAA works, and the way the appropriations work, it will take time, and that is not hitting them or saying there is anything wrong with them. They are doing the best they can, but they are severely limited by their funding.

Aging aircraft is a problem. It will force us back into single engine airplanes, and single engine airplanes have more accidents than twins, and we know we have not been successful even though we have had single engine IFR approved. Not many are doing it because of the extra equipment they have to carry on the airplane. If we force people out of the aging aircraft, then we are going to force them back into singles.

Generally, airplanes start out in the Lower 48, and in Europe, and they run 10 years, and we see them for the second wind up here in Alaska, so to speak, and then after we are done with them they might end up in some third world country, but we do not get many new airplanes into Alaska, and if they are going to interpret the regulations to deprive us of the use of the current, every 737, every airplane that ERA has over there will go away. They are Conairs, they are twin Mortons, they are all Morton 10 years, 14 years old. They will all disappear. It would be an intolerable situation for the State.

The last thing I would like to mention is the Ketchikan corridor, seeing as how you brought it up. What I was told precipitated the Ketchikan Corridor was a new ILS that was asked for by Alaska Airlines and other airlines, an ILS 2, and it reduced the minimums from 1,000 feet down to 500 feet, and it was the fact that they would come down to 500 feet, that they would be too close to the people going out in the corridors.

I find it hard to believe that after all these years somebody has brought that up as an objection, because even if you fly the normal ILS down to 1,000 feet, at some point you are going to be at that same point of 500 feet as you go in, and you are going to be at that in VFR conditions if you are flying the ILS 1, and people can fly past you.

If it is down to 500 feet, they will not be flying down the corridor, so I do not know why FAA is making this such a big problem. The exemption is good, the separation is sufficient, it has worked well for 20 years, let us keep it going.

Paul Bowers brought up the idea that the FAA is kind of locked into with the airports of improving the safe areas around the airports rather than improving the runway. There is a similar thing happening with PAPI's and VASI's. Those are the lights and the approaches to runways. PAPI's our international standard. It is the IKO standard, and they are warning us to put those in all our runways because it is the IKO international standard.

VASI's work much better in Alaska, because if you come downwind at Fort Yukon and you turn base and you can see the VASI, you know whether you are high or low. You cannot tell on a PAPI until you are lined up straight with the runway whether you are high or low. A VASI is a much better indicator and safety device for Alaskans than a PAPI, and just because it is national policy to go with PAPI's and its IKO does not necessarily mean that we have to go that way in Alaska, and that is one of the problems again.

For your own home town, Congressman Young, from Fort Yukon down to Circle and down to Eagle, you cannot fly a small airplane down there, I discovered to my horror, because the MOA is now down to 100 feet in that area, and we are trying to work with the military so that we can get a corridor between Fort Yukon, Circle, and Eagle, so people can go down there at least to 2,000 feet safe altitude, especially in the summertime when we have people coming visiting Fort Yukon.

But it is an unprecedented time of cooperation that is going on at the moment. We are sitting around tables, we are talking to each other, Tom, from the Safety Foundation, the Air Carriers Association, the military, the FAA, the DOT, and we have been work-

ing so well together in this last year, it has been very refreshing to see that everybody is willing to speak out, and nobody is afraid to say certain things, and yet everybody is cooperating to make things better, and that is part of what led to that 5-year strategic plan.

PREPARED STATEMENT

I congratulate them for doing that. I congratulate both of you for inviting us here this afternoon, for having our say. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF FELIX MAGUIRE

Good afternoon Senators and members of the committee. Thank you for the opportunity to present some comments on the major issues affecting aviation in Alaska and their impact into the 21st Century. My name is Felix Maguire and I am president of the Alaska Airmen's Association, which is non-profit organization dedicated to the preservation and enhancement of General Aviation through education and safety. The Association has more than 1,200 member Statewide. It has its headquarters in Anchorage and has regional Directors in Fairbanks, Juneau, Kenai and Bethel. We work closely with all other civil aviation organizations, including AOPA, as well as the Military and State and Federal Government Agencies to preserver and enhance general aviation.

MAJOR ISSUES

Five year strategic plan.—We have worked with the above organizations to produce the Five Year Strategic Plan for Alaskan Aviation as proposed by the Adhoc Alaska Aviation Advisory Committee. This proposal is the result of all agencies, civil and government, gathering together and communicating openly with concerns for the best interest of aviation in our State. We whole-heartedly endorse its recommendations concerning: (1) The lengthening of runways to a minimum of 3,300 feet and providing safe shelter at every airport; (2) All weather approach and landing capabilities; (3) Availability of weather information; (4) Good communication and navigation facilities; (5) Weather video cameras; (6) A stable aviation work force. This vision for the future will meet many of the safety needs at the airports throughout the State. Our inter-model transportation system relies heavily on Marine transportation in the SouthEast, Road and Rail in South Central, and totally on Aviation in the North, the West and SouthWest. In a State where the infrastructure is so different from the rest of the United States, we emphasize that Aviation is the lifeline to the outside world for most Alaskan villages.

Weather information.—The installation of AWOS and ASOS has replaced many human observers throughout the State. Weather continues to be a major factor in aviation accidents in Alaska. The introduction of Video Cameras has been the greatest enhancement to weather reporting in the past 15 years. We encourage more use of this technology and greater availability to the public. The availability of weather and NOTAMS through such systems as LABS enabled users to access vital safety information before flight. LABS was discontinued this year as not being Y2K compatible. The replacement system, DAWN, is not available to the public. It is for FAA in-house use only. Other commercial systems are not as good and very costly. Why can't the FAA make DAWN available to the users via the Internet? It does not make sense for the FAA to hoard the information and give it out piece meal by phone or on DUATS. LABS provided for collectives. For example if an aircraft were flying from Fairbanks to Ketchikan, LABS would give weather at the appropriate airports en-route, Anchorage, Cordova, Yakutat, Juneau, Sitka as well as winds aloft and forecast. Using current commercial systems, the pilot gets the weather for every station in Alaska, using more paper and wasting time and energy. The FAA gets good information from the National Weather Service but is not making this available to the general aviation users. Why?

FSS stations.—These are the backbone for distributing information and weather in our State. The specialists at FSS are Grade 10 while their counterparts at AFSS are Grade 12. The AFSS has more sophisticated equipment but the FSS personnel are hard to replace. There is no scheduled training for replacements and after a year at an FSS the specialist inevitably moves on to an AFSS for the higher grade of pay. Ketchikan has been on reduced service for a year now awaiting replace-

ments. Temporary replacements come from the AFSS, get higher pay plus per diem, and this breaks down the moral of the FSS staff. Consequently, we the users suffer from shorter hours of operation; staff with less experience as the longer serving ones leaves. If this continues the FSS will close due to staffing shortages and the users will lose a valuable safety net.

Maintenance of facilities.—The FAA recently proposed to centralize its maintenance for the State in Anchorage. I was Chief Pilot for AT&T Alascom for twenty years here in Alaska and saw that company go through the same cost cutting exercise. There were several instances that will be paralleled by the FAA when trouble hits. The communications earth station at ADAK went off the air three months ago. All scheduled aviation came to a stop, as there was no weather reporting available and no ATC frequencies in operation. The island was isolated. Maintenance could not travel on a Charter, as there was no weather. Fortunately, the company has a corporate aircraft that operates under Part 91. We were able to fly to Dutch Harbor, fill up with fuel and then proceed to Adak for a "look see." Being part 91 we were able to land and get the maintenance technician to repair the Earth Station. The FAA does not have as part 91 aircraft in Alaska so what will it do if a critical navigation system goes down. We know how difficult it is to get into Juneau some days even with all systems working. We encourage to FAA to rethink this policy as long as there are ground-based facilities. In the middle of the next century, if we have only Satellite based non-ground facilities, then the technicians could be centralized.

Future planning.—I came to Alaska in 1974 as an Air Force Pilot and since then I have noticed the great improvement in many airports and a deterioration service by the FAA. This is in part due to a plan that implemented to replace FSS stations and weather reporting with un-tried automatic equipment. Future plans should not be implemented until the replacement systems are proven to be successful. Our Association fully supports the Capstone project that has so much promise for the future. At the same time we know that it will be some twenty years before it is all refined and ready for operations use everywhere. In the meantime, Bethel needs its radar. The radar has been approved for installation in Bethel every year since 1987 and each year it gets dropped for lack of funding. The measurement used that counts passengers passing through the airport is unsatisfactory. Two B.747's could carry all that travel in one day so the FAA drops the requirement for Radar. If they used the number of aircraft movements, they would find Bethel is a busier airport than of the lower 48 airports. An exemption needs to be made so that Bethel gets the Radar that is necessary to provide more safety. The record of radar being introduced at King Salmon shows that the flow of aircraft increases with the introduction of approach radar.

Aging aircraft.—Twenty years ago I flew the first King Air around the state. Others were flying Navajos, and Cessna 402 as well as a myriad of single engine aircraft. Over the ten years of flying the King Air other started flying similar aircraft. In 1989 we switched to a Cessna Citation V. The runways were improving and the Citation 560 could handle gravel and short runways of 3,000 feet. This is a part 91 operation. To use the aircraft for Part 135 or Part 121, a longer runway would be required. The trend has been from Piston twins to Turboprop, and in the future it will lead to jets. There are no piston twin being made that would replace the aging Navajos and others. In Alaska, we tend to get the second-wind aircraft; those that have been used for ten years in the lower 48 and Europe appear in Alaska. When they finish their time here they go on to Africa and other less developed countries. The new NPRM would kill the aviation business in Alaska. Surely, the intent was to prohibit failures such as the B.737 that came apart in Hawaii. This NPRM will force Alaskans back into single engine aircraft. They have a worse record for safety and mainly fly VFR. The result would be a retrograde step for Aviation.

Better communications, cooperation and interchange of ideas is a necessary ingredient for the future. I thank you for allowing us to express these thoughts and hope that you will be able to consider the special needs of a State that depends so much on aviation.

Senator STEVENS. Thank you.

Ken. Ken Acton.

STATEMENT OF KEN ACTON

Mr. ACTON. Thank you, and good afternoon, Senator Stevens, Congressman Young, and the public. Thank you for holding this hearing in Alaska, and so close to those of us who are directly affected by the issues of commercial aviation.

I would like to address three fundamental issues and two emerging issues for the future. In the same manner that many of the challenges facing Alaskan aviation are not new, I would like to suggest that some of the first issues for the future are not new, either, namely, any future demands and accommodation of Alaska aviation will still include reliance on a handful of fundamental requirements, and they are, available weather information, reliable airport facilities, and consistent FAA oversight and support of the industry.

I believe both the weather and the airport facilities have been addressed prior to my time, so in the interest of time I will not dwell on those. I would like to reinforce the issues that Mr. Bowers brought up and Dick Harding brought up and Felix brought up, all about the Alaska aviation, the 5-year plan and the minimum standards for airports.

I would also like to endorse the comments, the previous comments about alternative and more weather sources. This is the single best way that we can improve aviation safety in Alaska, is the expansion and the increase in the number of weather sources throughout the State.

The third fundamental need that I mentioned was the need for consistent FAA oversight and support of commercial operators. My business allows me to work with several operators and with several FAA representatives, and I have discovered, along with my clients, that there are certain patterns that impede both the FAA and commercial operators from maintaining an open working relationship. The three most common patterns are the lack of accessibility of assigned FAA inspectors for their oversight and support, the instability of inspector assignments, and the inconsistent interpretation of FAR.

I believe these patterns that exist between operators and their assigned inspectors are indicative of a much larger pattern, and Dick Harding mentioned it earlier, specifically the well-intentioned FAA initiatives for safety that we have seen in the last 10 years have not significantly improved the safety record of Alaskan aviation. What we need instead are consistent, stable, and predictable expectations from the FAA that will help create the trust and the cooperation that will strengthen safety, service, and compliance.

Several speakers prior to me have mentioned Capstone, and I, too, would like to endorse Capstone, and mention it as illustrative of the need for these three fundamental issues in the future, namely, when we look at the system, I mean, it is an exciting system, and I cannot think of a better model for the theme of this hearing, you know, the issues of the 21st Century, and when we look at the ingredients of how it works, being able to download weather into the cockpit, being able to tell where you are and have that communicated to the other airplanes, that is all great, but still we understand the importance of the fundamental needs, one, the importance of state-of-the-art weather services, and more of them; second, reliable airport facilities as aircraft operate in an IFR type operation into many of these locations; and third, broad support and participation, which can only occur with an open and trusting relationship between the regulators and the aviation users.

I did mention that I would like to bring up two issues that I see as emerging issues in the future, the first of which is an increased need for responsible risk management on the part of and by the initiative of operators, incumbent on the Alaskan aviation industry and individual operators to create better risk management and safety systems for its operations. Increased market competition and the experience level of the pilots flying in Alaska require this.

Without specifically defining a model, or defining what would be the best program for all, I think the need defies that. Rather, I think we can identify qualities of good risk management that are appropriate to rural Alaskan aviation. Initial and recurrent training programs should include aeronautical decisionmaking not only for pilots, but for management as well.

It is time to recognize and respond to the fact that the corporate culture of operators influences the safety of flight operations, and that this culture can be trained and managed.

The second quality of good risk management is the incorporation of increased two-pilot experience and revenue flight operations. I am not suggesting doing away with single-pilot operations. I am simply suggesting that operators need to pay more attention to the quality control of the pilot in the cockpit. This would include programs that require new-hire pilots to fly in revenue line operations with experienced pilots prior to assignment in single-pilot operations, and especially during marginal and winter operation and flight conditions. This also includes routine company checks of line pilots throughout the year.

The last quality that I would like to identify of good risk management systems in the future are the need to make the go no-go decisions of operators, to define them in procedural terms. I am speaking of the decisions surrounding specific flight assignments and their release for flight. PenAir has demonstrated leadership in this area by developing a model for flight release that is not only participative between management and pilots, but it also is defined in qualitative terms.

The FAA needs to encourage and support the efforts of operators to define appropriate risk management for their operations. I do not believe that the FAA should regulate a one-size-fits-all model for such programs, and I was pleased to hear Mr. LaBelle say that as well. I would agree with what Felix said, that the industry, the operators, general aviation, and the regulators have a relatively good long-range planning atmosphere right now.

What I do believe is that operators are in a better position to create appropriate risk management measures for their own operations, but they need resources, training and support to do so, to design these systems.

The last issue I will address is changing patterns of scheduled air service in Alaska. We are all familiar with the established pattern of large aircraft serving mainline routes to hub cities, and small aircraft serving bush village destinations.

As we experience more competition, improvements to our airway and airport infrastructure, there will be greater pressure to support different types of aircraft and route structures than we have seen in the past. We are already experiencing pressures from the passenger, freight, and mail markets that will blur the line separating

large mainline aircraft on given routes versus small aircraft on other routes. The introduction of the commuter rule in 1995 is one example of regulation that inhibited the improvements to service and safety, and reinforced this two-class system of scheduled air service. I believe our future will include and require the use of more midsize aircraft in the creation of nontraditional route structures. While both small and large aircraft will diminish, they will also still be represented in several markets. In other words, the market will be much more complex, and it will be nice to think that the regulatory environment in the future will not only be flexible enough but also accommodate and support these changing patterns in scheduled service.

In closing, the challenges of maintaining a safe and viable commercial aviation industry I think will depend on improving airway and airport infrastructure, the cooperative efforts between FAA and the industry to address safety and compliance, and the regulatory environment that supports appropriate service to the Alaskan market.

PREPARED STATEMENT

Thank you very much. I will be submitting written comments.

[The statement follows:]

PREPARED STATEMENT OF KEN ACTON

Good afternoon Senator Stevens, Congressman Young, members of the committee, the panel and the public. Thank you for holding this hearing in Alaska and close to those of us who are so directly effected by commercial aviation. I have worked in the Alaskan aviation industry for 21 years in administration and training. In that time, I have worked for Part 121 and part 135 carriers in rural Alaska, have served on the board of the Alaska Air Carriers Association, and been a consultant to the industry. I would like to speak in behalf of the issues of rural Alaska aviation and many of my clients, including the interests of Part 135 operators, both scheduled and on-demand, and the markets they serve including Alaska communities as well as on-demand off-airport flights for the tourism, recreation, and sport fishing and hunting industries.

INDUSTRY CHALLENGES

We all know that aviation is the essential transportation link in rural Alaska, and we also know that rural Alaska is a demanding flight environment. There is a limited airport and airway infrastructure. The weather is harsh and often unpredictable. Most airports consist of small, unpaved runways that are subject to varying year-round maintenance requirements. There are few options for IFR flight. The nature of the market and its economy of scale dictate the use of small aircraft in VFR operations. The flight activity can be intense with the industry currently supporting some 300 certificated operators in the State of Alaska. And finally, because of the nature of the commercial pilot profession, rural Alaska operators attract low time pilots who are unfamiliar with the area and its unique requirements.

RESPONSIVE EFFORTS

Most of these industry challenges are not new, nor have they been ignored. There have been several responsive efforts to the challenges of creating and maintaining a safe and affordable air transportation system in the State. The automated weather reporting systems, both AWOS and ASOS, have been a welcome addition. We have seen a continuing program to upgrade and improve many rural Alaskan runways. The Capstone project is an exciting and promising plan for improving airway capabilities. And the mail transportation policy supports the presence and viability of scheduled air service at reasonable cost.

Indeed, many things are working very well, and we all share a debt of gratitude for the support and leadership of the congressional delegation.

I would like to address 3 fundamental issues and 2 emerging issues for the future.

FUNDAMENTAL NEEDS OF THE FUTURE

In the same manner that many of the challenges facing Alaskan aviation are not new, I would like to suggest that some of the first issues for the future are not new either. Namely, any future demands and accommodation of Alaskan aviation will still include reliance on a handful of fundamental requirements: available weather information, reliable airport facilities, and consistent FAA oversight and support of the industry.

WEATHER INFORMATION

Weather information is essential. Unfortunately, most aviation accidents in the State of Alaska are weather-related. The availability of reliable and more weather information is the single best way to improve the flight environment and it is the most repeated concern of the industry. The automated weather stations, both AWOS and ASOS, have significantly addressed the need for increased weather information. The "mike-in-hand" program and the addition of "flight cam" installations help pilots and operators see an even broader picture of the weather. The industry supports all of these systems. Simply put, the availability of reliable weather reporting systems in multiple locations will remain a fundamental requirement for maintaining a safe flight environment in Alaska's, future. We need more weather reporting locations. We need a variety of source information.

RELIABLE AIRPORT FACILITIES

Maintaining reliable airport facilities is the second fundamental need I would like to highlight. The State of Alaska with FAA capital investment continues to upgrade and improve the runways in rural Alaska. We would all like to see it happen sooner than later.

As we enter the 21st century, most of our runways are still short, unlighted, and unpaved, and are subject to mud, ice, and drifting snow. One of the highest levels of Part 135 flight activity occurs in the Yukon-Kuskokwim delta where 70 percent of the runways are under 2,500 feet in length and many are unlighted. And even though the Alaska Supplement may describe the surface of these runways as gravel, we know that in several locations that means the best fill material which was readily available, which is often a coarse river silt. We need runway improvements to bring our airports up to at least the minimum standards identified by the Alaska Aviation Coordination Council.

We also know that we cannot always rely on future capital funding of runway improvements. In fact, capital funding is a small part of the long-term equation. Runways, navaids, and automated weather systems come with the price of maintenance. The State of Alaska and the FAA both face budgetary constraints that seem to directly effect the response time of runway and airport facility maintenance. Reports of unreliable or irregular airport facilities are often first reported by users and not by the providers. VFR pilots and operators have learned that you often have to "go see for yourself" because the accuracy of some of the AWOS/ASOS systems and the reliability of some runway maintenance has not been proven. Unfortunately, this puts all of us right where we don't want to be; namely it invites operators and pilots to ignore some of the intended support systems for flight ops decisions. We need definitions and criteria for reporting facility outages and predictable response times for their repair. And we need reliable runway maintenance.

Another part of our airport facilities include the flight service station system. The current flight service station system is still functional, but the regional aspect of the FSS system lacks sensitivity to the local flight environment. This is particularly true in areas that require operations under special VFR flight rules of FAR 91.157. Let me give you a recent example. Class E airspace was recently extended down to the surface area in both Aniak and Saint Marys. This has made for a safer flight environment when the airspace is accommodating both IFR and VFR flight activity simultaneously. However, these flight conditions represent less than 10 percent of the daylight hours and introduces control of a VFR flight environment without any local presence. Prior to these new airspace procedures, all airport traffic participated in the Common Traffic Advisory Frequency (CTAF) procedures. Under the new airspace classification whenever the ceiling is less than 1,000 feet and 3 miles of visibility and regardless of any IFR flight activity, the VFR pilots must obtain special VFR clearance from the Flight Service Station in Kenai to operate into and out of these runways. This includes having to wait for a landing clearance while holding in the vicinity of mountainous terrain in marginal weather, especially in Aniak. The remote control of VFR flight arrivals and departures at these airports does not in-

clude a sensitivity to the flight conditions nor the presence of ATC to encourage broad compliance.

Alternatively, there was a time when both Saint Marys and Aniak had the equivalent type of airspace (a control zone) but it was only activated when an IFR approach was initiated. This seemed appropriate to the level of mixed VFR and IFR flight activity and in lieu of any local ATC personnel in these locations. Outside of the times of active IFR flight activity, the airspace was uncontrolled and the traffic relied on use of the CTAF.

At the end of the day, and on the threshold of the 21st century, we need improved airport facilities and some assurance that these facilities will be reliably maintained and appropriately administered.

FAA OVERSIGHT AND SUPPORT

A third fundamental issue for future operations is the need for consistent FAA oversight and support of commercial operators. My business allows me to work with several operators and with several FAA representatives, and I have discovered along with my clients that there are certain patterns that impede both the FAA and commercial operators from maintaining an open and working relationship. The three most common patterns are (1) The lack of availability of assigned inspectors for oversight and support, (2) the instability of inspector assignments, and (3) the inconsistent interpretation of FAR.

Accessibility of FAA certificate inspectors can be difficult. Operators are sometimes stymied in their efforts to obtain requested Ops Specs changes, required check rides, or simply a request for FAA guidance due to the absence of their inspector. Many inspectors work a 4-day work week, are often assigned to training or other administrative duties, or are simply unavailable for unexplained reasons. In such cases, other inspectors can seldom respond to a specific operator's request and the operator must wait until their assigned inspector becomes available. Commercial operators must necessarily rely on assigned FAA representatives to conduct operations and the operators need to rely on the FAA's availability as well.

There has also been a pattern of apparent random reassignment of inspectors to commercial operators. In the past three years, I have several clients who have had as many as three and four inspectors assigned to their certificate oversight in less than 12 months. In fact some inspectors have been assigned to operators and subsequently reassigned to new operators without any introduction or exchange between the operator and the inspector. This pattern seems to be especially prevalent among the smaller operators.

Any re-assignment of inspectors can quickly reveal a third pattern and that is the inconsistent interpretation of FAR across different inspectors. As a result, regulatory compliance matters rather than safety or service can dominate a commercial operator's management. A lot of my client workload consists of helping operators respond to varying interpretation of FAR due to inspector re-assignments.

These patterns of oversight between operators and inspectors are indicative of a much larger pattern. Specifically, the well-intentioned FAA initiatives for safety that we have seen in the last 10 years have not significantly improved the safety record of Alaskan aviation. Consistent, stable and predictable expectations from the FAA will help create the trust and the cooperation that will strengthen safety, service, and compliance.

CAPSTONE

I would like to briefly mention the Capstone project to illustrate my concern for the first three fundamental issues I have addressed. Capstone offers some real promise for increased aviation safety with 21st century technology and an appropriate governmental response to the theme of this hearing. When we look at the ingredients of its systems and how it will work, we are reminded that our future will still require: (1) state-of the art weather services, (2) reliable airport facilities, and (3) broad support and participation which can only occur with an open and trusting relationship between FAA and the aviation users. Capstone will highlight and increase the demand for these basic Alaskan aviation needs.

INDUSTRY RISK MANAGEMENT ISSUES

There are two more issues for the future that I would like to address. The first of which is an increased need for responsible risk management on the part of operators. It is incumbent on the Alaskan aviation industry and individual operators to create better risk management systems for its operations. Increased market competition and the experience level of pilots flying in Alaska require it. Without spe-

cifically defining these systems, we can identify a few qualities of good risk management that are appropriate to rural Alaskan aviation.

Initial and recurrent training programs should include aeronautical decision making for both pilots and managers. It is time to recognize and respond to the fact that the corporate culture of operators influences the safety of flight operations and that this culture can be trained and managed.

A second quality of good risk management systems is the incorporation of increased 2-pilot experience in revenue flight operations. This includes programs that require new hire pilots to fly in revenue line operations with experienced pilots prior to assignment in single pilot operations, especially during marginal and winter flight conditions. This also includes routine company checks of line pilots throughout the year. I know of several operators who have incorporated these qualities into the training and management of their pilots and have acquired greater confidence in their own flight operations, and have earned the respect of the public, regulators, and their insurance underwriters.

The go/no-go decisions of operators, that is, the decisions surrounding specific flight assignments and their release for flight, need to be defined in procedural terms. Penair has demonstrated leadership in this area by developing a model for flight release that is not only participative between management and pilots, but is also defined in quantitative terms.

The FAA needs to encourage and support the efforts of operators to find appropriate risk management systems for their operations. I do not believe that the FAA should regulate a one-size-fits-all model for such programs. Operators are in a better position to create appropriate risk management measures for their own operations, but they need resources and support to do so.

The interests of the industry and the public will benefit when operators procedurally define risk management systems and make them the priority they deserve in their daily operations.

CHANGING PATTERNS OF SCHEDULED SERVICE

The last issue I will address is changing patterns of scheduled air service in Alaska. We are familiar with the established pattern of large aircraft serving mainline routes to hub cities, and small aircraft serving bush village destinations. As we experience more competition and improvements to our airway and airport infrastructure, there will be greater pressure to support different types of aircraft and route structures than we have seen in the past. We are already experiencing pressures from the passenger, freight and mail markets that will blur the line separating large mainline aircraft on given routes versus small aircraft on different routes. The introduction of the "Commuter Rule" in 1995 is one example of regulation inhibiting improvements to service and safety and reenforcing this two-class system of scheduled air service. I believe our future will include and require the use of more mid-sized aircraft and the creation of non-traditional route structures. While the use of both small and large aircraft will diminish they will also still be represented in several markets. Service and safety will be enhanced if the regulatory environment accommodates the changing patterns of scheduled air service.

SUMMARY

In closing, the challenges of maintaining a safe, viable commercial aviation industry in rural Alaska will depend on improving the airway and airport infrastructure, cooperative efforts between FAA and the industry to address safety and compliance, and a regulatory environment that supports appropriate service to the market. Thank you for the opportunity to express these issues. I will be happy to answer any questions and will be submitting written comments for the record.

SAFETY IMPROVEMENT TREND

Senator STEVENS. Thank you very much. Don, do you want to go first this time?

Mr. YOUNG. Thank you, I want to go back to what I said before about the efforts put forth, especially Mr. Harding and Mr. Wardleigh. You have been around here a long time. The percentage of accidents now, today, with all the advantages we have, was that the percentage improved, or is it about the same as what it was, say, 25 years ago?

Mr. HARDING. One of the things we do not have is an actual accurate number of flight hours for 135 operations. It is not required for people to report that. We do not. We know there is an increase in aviation activity, and we know that the accident rate has been level, so we can say there has been some improvement, but we do not what that number is in actual hours flown in 135 operations.

Mr. YOUNG. This is another thing that I am seeking here, if anything is, you know, we are supposed to be for safety and not for regulation for just regulation's sake, and that is my philosophy and always has been. That is one of my biggest concerns over the years is, we pass regulations because it is the thing to do, but in result we did not become any safer, and you know, I may be incorrect in this, but when I first started flying up here 40 years ago, we had a pretty good safety record. We had a lot of experienced pilots, by the way, even then, and if I go back to the 9010, one of our biggest concerns, and I am glad to hear we are getting more local people into the flying, a lot of the pilots, as you well know, come up here to get their hours in to go back outside. Those first hours, I think you mentioned it, and you mentioned it, you know, those first hours are the period of time we have the most accidents, and I still think that is what we should be addressing, is the pilot involvement in the accidents, more so than anything else. I do not know how we do that. Maybe we are addressing it.

But you talk about gray hair, I can remember one thing, I went to New York about 3 years ago and jumped in a cab, the worst ride and the biggest scare I ever had in my life. The guy was from Russia, had been here 6 months, driving in New York. Now, think about that a moment. Some of the time you get in these airplanes and you see somebody in the airplane that has got nice—he is a young fellow, good guy, wants to do well, find out he has not been flying in Alaska but about 3 weeks. That bothers me.

Now, this is for the industry to think about. I think that is something you have to address.

As far as the 60-year-old, Mr. Harding, I happen to agree with you on this 100 percent. The problem is, you have some people within your industry that are flyers that do not agree with you, that they do want the age of retirement at 60 years old. If we were to change that, I think the only way we could possibly do it would be for Alaska only. I want you to know that there are certain people that are flying within the unions that do not like the idea of changing that retirement age. I like seeing that gray beard and the gray hair to make sure I have got somebody with a little experience in that seat.

So you can comment on that. As far as the air space goes over national parks, we are addressing that issue every day. I am not terribly confident, under this president and administration, that they believe as we do. We think the law is on our side, but it is going to be maybe a big battle. We hope we can win on that one.

DAWN SYSTEM

I want to ask one question, Mr. Maguire, on the DAWN deal. Why can we not use that? I mean, are they saving——

Mr. MAGUIRE. What they say is that if somebody gets into the DAWN system they can get into the FAA's whole system, and then

they might be able to do some damage within the FAA computer system.

Mr. YOUNG. But that information was available under the other system, was it not?

Mr. MAGUIRE. It was available, but you know, in this age of computers, I do not see why a fire wall could not be put in that you can go in and find the weather and not go beyond that. The way it was explained to me was that if you got in that you might be able to alter something, or change something that may be bad for the country.

But at the same time, I can go into the military one and I can get the weather from the military for Elmendorf or even the airports over in Bosnia if I want, and they do not seem to be concerned about the security, but the FAA seems to have tighter security requirements.

Mr. YOUNG. Well, I think that is something the Senator and I can look into, because if the information is there and improves the safety factor, to me it is ridiculous not to have that information available for you. That does not make sense to me.

Mr. MAGUIRE. It does not make sense to us, either.

Mr. YOUNG. Senator.

AGE 60 RULE

Senator STEVENS. Thank you very much. You know, on the age 60 rule. I agree with Don, it is going to be very difficult to deal with. We do need to keep the retirement age in perspective, however, because one of the great problems right now is to attract more people into training, younger people into training, and that is one of the reasons that they say they want the old ones out so that there are opportunities for new ones to come in. It is a very difficult problem.

Mr. YOUNG. Will the Senator yield just for a moment?

Senator STEVENS. Sure.

Mr. YOUNG. I think I am correct, I was flying with a 59-year-old person the other day on a major airline, and he informed me that in 2 years time 60 percent of the existing pilots today will have to retire by the year 2002. Now, who are they going to replace them with? Now, that is something we had better think about.

Senator STEVENS. I was going to get to that. Our statistics show that the demographics of society are such that if the older pilots cannot fly, we will soon not have enough pilots to keep our commercial lines going. It is a very difficult problem to deal with.

OPERATIONAL RISK MANAGEMENT

Dick, my staff tells me you have got this innovative program now, ORM, operational risk management, which the Army started sometime ago. I am told you are the only commercial carrier of any class that has instituted the concept. I think we need to know, for the staff and all of us, what is PenAir's risk management program, and should we try to make it apply outside of Alaska to the aviation industry?

Mr. HARDING. The operational risk management system is something we have developed. We started with doing risk assessment of runways, putting a numerical value on them, and when they got

to a certain risk factor we would quit operating there, and that is how we discontinued serving some of them.

We met with the military, and we were talking to them, and they said, you know, we have this RM program. We had the worst helicopter safety record in the world, and 6 years after adopting this program we went to the best, so that kind of caught my attention, and I plagiarized everything they had, rewrote our program, and we have one now for our 135 and our 141 operation.

Senator STEVENS. Could I interrupt you, please? They have given me an emergency message. If Dr. Robert Alberts is in the audience, would you please step out into the lobby.

Thank you very much, Dick.

Mr. HARDING. Anyway, we have taken the program, and before a pilot leaves the home station he has to fill out a piece of paper, it takes about 15 to 30 seconds to do it, it gives him two things. One is an awareness of the risk involved in that particular flight, and the other one, when it gets to a certain point, it gets management involved, and this is one of the biggest problems we have in Alaska, is getting operational control, getting the managers—I cannot fly with every pilot in Bethel and King Salmon all the time, so I have to rely on them working in that area to make the decisions, and with this operational risk management it gives us an opportunity to, with higher risk flights to get involved in the decision-making of go or no-go, and we have been doing it for about 2 years now and it has been very successful and, of course, the pilots had first fought it because pilots are not paper-oriented people, but after they realized that it has taken some of the responsibility away from them and sharing it with management they endorse it now.

Senator STEVENS. Anyone else talked to you about using the system?

Mr. HARDING. We have had quite a few carriers in Alaska, and I have had several major carriers from outside Alaska that have inquired, and I have sent them a copy of the program also.

Senator STEVENS. Have you shared that with other carriers?

Mr. HARDING. Yes. Any other carrier that is interested in that, we are willing to share it. If we can lower the accident rate of other carriers it is to our advantage, too. We would like to see less accidents in Alaska, and I think this program is probably the most cost-effective accident-reducing program that we could possibly come up with. It does not cost anything. All we have to do is, it takes a little time to fill out a piece of paper.

Mr. YOUNG. Senator, can I ask just one question? When you say accident, are you talking about all accidents, on ground, in the air, landing, take-off and such? You know, maybe a pilot runs into a pylon, or something like that. Is that considered an accident?

Mr. HARDING. An accident has got a very narrow definition in the part 830 of the regulation, and from the time he starts his take-off, taxiing, to the time he pulls to a complete stop and stops the airplane it is considered in-flight, and that is considered an accident at that time, if he does a certain amount of damage.

STATE OF GENERAL AVIATION IN ALASKA

Senator STEVENS. Tom, what is the situation here now in terms of the state of the general aviation community? I have already said my great respect for you as an instructor, because you were able to get me certified after 4 days. That is pretty good. But Young says he is still not going to ride with me unless you are there. But is the state of aviation generally in Alaska healthy? Should we be as concerned as we are about these safety statistics we are hearing?

Mr. WARDLEIGH. Senator, you certainly should be as concerned as you are. In our review of the past 18 years or so of the Safety Foundation's activities, nothing much as changed, and we see the key to reducing accidents as better information and better understanding by the pilot. We endeavor to change that through research and public education.

We are trying to teach, for instance, the basketball teams, do not wear jeans and sneakers if it is 40 below and you are going to ride in a Cessna 206 to play a game. Everyone has to be responsible for their own safety, and that includes the doctors, dentists, lawyers who leave here on Friday afternoon to go catch a trout some place.

They cannot blame the weather service if the weather is different from the forecast. They cannot blame the FAA. The weather that is most important—I was one of the strong supporters of the weather cameras, and of keeping the flight service stations that you facilitated in remote Alaska, but really down to the nitty gritty, the weather that is important to you is what you see through the windshield. It does not matter what the forecast is. When Felix and I are out flying together, if we cannot cope with what we see through the windshield, we had better have an alternative plan to go some place else and do something else.

One of the concerns that I see facing general aviation in Alaska right now is the EPA's mandate that we stop using leaded aviation fuel, 100 low lead. As recently as yesterday I talked to the Shell Oil Company engineer in charge of these projects. They have not yet produced a substitute fuel that is free of lead that will allow us to operate the thousands of aircraft engines in Alaska, the pistons, the old round and flat engines that are so common in our recreational activities and in our air taxi activities.

Right now there is an ethanol fuel that is being assessed, and all you have to do is change the pistons to cam shafts to cam followers in the valve seats in order to make it compatible with your flat engine, and there is no way that those folks with the big round engines, like Northern Air Cargo, can ever realize the service they need from their engine if we must in fact go to unleaded fuel with the present state of research.

Senator STEVENS. Well, back when I was a kid in order to increase the performance of engines we put more lead in it. Can't you add lead to some of these other products?

Mr. WARDLEIGH. Well, you can, but that does not meet the EPA requirement that it be lead-free. At the present time there is only one source of aviation fuel lead. That is a tiny little factory in England that is still making the stuff. There is no other source any more.

Senator STEVENS. What do you think, Mr. Maguire—what do you think about the state of aviation right now, Felix?

Mr. MAGUIRE. I think generally it is fairly healthy. I think there are more people wanting to get back into it. The numbers have gone down. The numbers of pilots qualified have gone down.

I think one of the problems we have—and I hate to say this with Dick sitting here—is what Congressman Young brought up about the young pilots coming up here and getting some experience and leaving, and I think that is partly because we do not pay them very well in Alaska.

Our air carriers are living on the bread line, and because we do not pay them well, they do not stay. They make bigger dollars somewhere else. So that is an industry problem, I think. They have to reconcile, if they pay them more, then how are they going to make enough money off a ticket to pay for that.

LAKE HOOD FLOAT PLANE CAPACITY ISSUES

But the general aviation, I think it is reasonably healthy. There is still 120 people out on the waiting list at Lake Hood to get a float plane spot, and it is still taking 15 or 16 years to get a spot out there, so we do need another facility somewhere to cope with that.

Senator STEVENS. Is there a plan for that?

Mr. MAGUIRE. There is not, no.

Senator STEVENS. Mort, have you gone? Did Mort leave? It is too bad we did not ask Mort that.

Mr. MAGUIRE. One of the problems, there was a plan some years ago to build some more float plane slots at Lake Hood, but the area they picked, unfortunately they found when they did some dredging that all the rest of the water of the rest of the lake would drain out through it and it would go, because it does not have a proper chalk base, so they decided not to touch that.

Senator STEVENS. Well, let me ask all of you, do we need another location in this area? I am told we have about half of the float planes in the United States up here now. Do we need another location away from that general large airport for the float planes?

Mr. MAGUIRE. Well, we feel that we do because of the congestion that is over there. Anchorage International is very congested with Lake Hood traffic, Merrifield traffic, Elmendorf traffic, and Anchorage International traffic altogether.

Another facility would be good. However, everybody likes the fact that it is downtown and it is out there in Lake Hood, and everybody would give that first preference.

Mr. YOUNG. Let us go back to the Clinton project, though. That is not that far away, and if they were willing to sell them for exchange, that might be the most—I would say the most logical area to have one.

Mr. MAGUIRE. There are a limited number of aircraft available, so even if—you know, if somebody wants an airplane they have to probably buy one that is already out there. There is not too many new ones coming into the State.

Mr. YOUNG. Mr. Maguire—can I ask a question, Senator?

Senator STEVENS. Sure.

Mr. YOUNG. Or all of you, and I am saying this because it is important. You say everybody is sitting down and talking and working for a solution. That was your statement. Does that include the FAA?

Mr. MAGUIRE. That does very much include the FAA, but they are hamstrung a little bit, you know. You must realize that the structure of the FAA is such that the local administrator does not have much clout.

Mr. YOUNG. Well, this is what I am—with all due respect, this gentleman has a lot of clout. I like to think I have got a little clout, and I will have a little more if I get where I think I am going to go, and I think it is ridiculous for them to say this is the way we are going to do it, we do not care what the local administrator says, but we are going to do it because we are God.

We are trying to look for safety, and if there is a better way of doing it other than one-shoe-fits-all, I think that ought to be—the reason I asked Mr. Poe is there enough flexibility, if he does not have the flexibility, then I would like to write something to give him the flexibility so we can achieve what we are seeking, that safety, and have our consumers without paying an arm and a leg, get from A to B, and I think that can be done, you know.

Mr. MAGUIRE. Well, my impression is, it is like any major corporation that has a headquarters out of State, and different department members, as willing as they are, they report to somebody in Washington, DC, not to Pat Poe. They report to somebody back there.

Mr. YOUNG. You mean within the Alaska region they do not report to Pat Poe, they report to Washington, DC?

Mr. MAGUIRE. They report to somebody in Washington. I am not FAA, but that is the impression I get from them.

Mr. YOUNG. We have to work that out somehow.

Senator STEVENS. No, it is an administrative management rather than substantive management concept that they have got.

Can I go back now, chief—do you understand what I am saying? They have a substantive line, and the control—I went through that with them once before.

PLANNING FOR ALASKA'S FUTURE

Let me ask you this. This intrigues me to think about trying to find another place that would be equally almost successful to the Lake Hood location, where we might get additional float plane capability. Do you have any suggestions to us? God willing, we hope to outlive Strom Thurmond, you understand that. But we are probably not to do it by too much. We have only just so much time in these positions we have, and God willing, and Alaskans—I am not supposed to say these things, probably, but you know, we have 8 to 10 years where the three of us have positions that Alaska will not see for another 50, at least, probably.

Now, what should we be doing is to try and make sure that when we leave our watch we have the best state-of-the-art system in aviation. What are we missing? What should we be working on to set in motion plans that take 5 or 6 years to come to fruition? Have you given that any thought?

What does general aviation, what does commercial aviation need in Alaska to be really the state-of-the-art, top-drawer transportation system we need for the next century?

Dick, what do you think?

Mr. HARDING. The strategic plan that we put together, that 5-year plan was put together by all of us. We all did get together on that.

Senator STEVENS. Did it think out that far?

Mr. HARDING. Yes. It is 5 years, at least 5 years ahead.

Senator STEVENS. What is missing? What have we not done in it?

Mr. HARDING. Well, we get down to the smaller things, like the float plane, we do need another facility for float planes. As great as Mort Plumb has—the more he does for drawing cargo to International, the more it leans on the general aviation out there and squeezes us out, and it is going to push us further and further away, because they call the shots. The large carriers call the shots at International.

They bring in all the money, so general aviation gets pushed aside a little bit, and we need to protect that, and I think if we could develop a lake out at Birchwood, I think that would be great, as Tom said, the one at Eklutna, if you could use your influence to get that lake for us, that would be great.

Senator STEVENS. Is the summary of the 5-year plan similar? My staff says they have got it. I have not seen it. Okay. Tom, have you got any suggestions?

EKLUTNA FLOAT PLANE FACILITY

Mr. WARDLEIGH. Well, I would like to speak to the Eklutna situation. It is a half-flooded, tidally influenced termination of the Eklutna River, which is a salmon-carrying river, and the plan that we proposed some years ago would put a dike in the form of a wheel strip right at the tide line where the clay breaks into the inlet to protect the float plane pond.

You could then dredge a rather large pond that would accommodate a large number of seaplanes, have an operating strip essentially parallel to the runway, and by lining the pond with gravel you would enhance the salmon-spawning available area and by diking the thing and monitoring the height of it you would inhibit the inflow of the salt water, so you would keep the whole system fresh, it would be noncorrosive to the floats.

And essentially the Birchwood and Eklutna area lies in the eye of the tornado, where the winds come out and spin around Matanuska and the Kenick Glacier and just blow like the dickens across Palma and Wasilla. There is an area of calm winds most of the time at the Birchwood Airport and the Eklutna gravel pit area.

It just is an ideal sanctuary if some agreeable land exchange could be made to get the land made available. I doubt that the intertribal politics of the Eklutna Tribe will ever facilitate that. I do not know, but it is difficult and cumbersome. If the State could own the land, it would facilitate accomplishing what is needed.

Senator STEVENS. Okay. That is a good alternative. Anyone else make any comments?

Mr. ACTON. I would echo Felix's statement about the 5-year plan, too. I mean, that statement about what constitutes needs for the future. That has been a collective effort, anyway, articulated by a collective effort.

The other thing that comes to mind, Senator, is more adherence by the FAA to accommodate the unique needs of Alaskan aviation. When we see new initiatives, new NPRM's, new HBATS, whatever came out from the FAA, it is not always recognizable that there is recognition of some of these unique needs, and more so, I do not think that that necessarily gets communicated down to the level that most directly affects operators, and that is the relationship between an inspector and an operator.

You know, I mentioned in my comments that there is a reassignment of inspectors. That is routine and to be expected, but seemingly in the last few years there has been quite a bit of it, and with some frequency, and many operators will simply get a new set of inspectors assigned to oversight of their operation, and find that everything that they have been doing and have been previously approved is now needing revision. Now, that makes no sense to me.

Mr. YOUNG. What you need is a manual that is consistent.

Mr. ACTON. Consistent, stable, and simple.

Mr. YOUNG. Not changing because the personnel changes.

Mr. ACTON. Correct.

LACK OF TRANSPORTATION ALTERNATIVES

Senator STEVENS. One of the difficulties we have is trying to convince the rest of the country of the fact that we have no highways. Not only do we not have Federal highways, we have very few State highways. We have very few local highways that join communities, and we are dealing with a system that replaces an infrastructure that covers a whole series of areas that are substantially supported by other programs.

The highways funds, the assistance to States, the urban grants, the HUD grants, all of those things that come into play that affect transportation systems in the south, we see very few of those. We are trying our best, I am trying my best to make certain some of that money comes in to us to meet our unique needs, but it is a very difficult thing to organize a transportation system based upon one support group that works out of a fund that is committed and primarily supports the commercial world.

Our general aviation is not looked at the same way as the people who drive—husband and wife each drive a car to work in Washington, DC. If we had a husband and wife flying different planes in Alaska, the difference would—you would see that acutely, because the assistance those two get, highway funds, local funds, police, all types of insurance coverage, et cetera, that is not available to the people flying up here, is just two different worlds, and to find money to finance our world is the problem. I am still working on that, and I think we have got to find some way to do it.

The Postal Service is probably the area where we have the greatest example of the Federal Government trying to meet our needs. They currently lose about $125 million a year in their operations up here. Everywhere else is operating on a plus basis, because it is a nonprofit, really not federally subsidized system now. But we

have to find some way to get some more money to this stream. I think we are going to keep up the development of this concept, and I would welcome your suggestions along those lines.

Do you have any other comments, my friend?

DISTANCE PLAYS AN IMPORTANT ROLE

Mr. MAGUIRE. Senator, if I might just—one of the thoughts that occurred to me, with the maintenance that I mentioned, that they are going to centralize maintenance in Anchorage, if supposing in Washington, DC, the runway lights go out and they have to bring somebody from as far away as Chicago to fix them, they might get a sense of how far people have to go from here to Ketchikan to fix the lights. They might understand a little bit better, because that is about as far as people will have to go if they centralize all the FAA maintenance in Anchorage.

If a light goes out in Barrow, it is like sending somebody from Wichita all the way over to Florida to fix the lights.

Senator STEVENS. I fought that problem with the Coast Guard once. Do you know they moved all the maintenance systems down to Seattle, and when they started paying overtime to send people out to Cold Bay, they learned, and it has been readjusted. It will not take long for people to understand they cannot finance that system.

Mr. MAGUIRE. But with the limited funds it will be wasted in the meantime.

Senator STEVENS. Yes. Well, let me thank you all for taking the time to come. By the way, Pat, you are still here. Anything we have said that you want to defend yourself on or comment on?

Mr. YOUNG. We have been fairly nice. I can tell you that right now.

MAINTAINING AN ACTIVE DIALOGUE WITH FAA

Mr. POE. No, Senator. I think I agree with a lot of what I heard. I think the only thing I would punctuate is the fact that there is an active dialogue.

Senator STEVENS. Well, it is to your great credit, my friend. I think there is a different attitude here in the FAA, and I can remember coming home and having meetings with the Airmen's Association in which your predecessor was not welcome. Not your successor, but your predecessor was not welcome.

We thank you for what you are doing, and I think that attitude that these people express of having a working relationship is good news as far as we are concerned. It means we can do our job a lot easier in Washington, so thank you very much. I just did want to give you a chance to speak up if you thought there was something that you should comment on.

RECOGNITION OF GUESTS AND APPRECIATION TO PARTICIPANTS

I do not know if you know it, but the staff of the Appropriations Committee for the House Transportation Subcommittee is here in Alaska with us. They have come up to witness some of the challenges and issues we face. I understand they were in rural Alaska

yesterday, and learned how to put on their shoes at 51 below, and other things—was it really that cold?—in Point Hope yesterday.

I do thank them for coming, and I hope that this hearing today has been as meaningful to them as it has to Don and me. We really do thank all of you in the audience for coming and participating, and I thank my good friend the Congressman for all Alaska for honoring us with his presence here today. It was a Senate hearing, but we are pleased to have Congressman Young with us at any time, and I do want to let the audience know if you have any comments or questions about answers that were given here, and you want to pass them on to us, you should write to me at the Senate in Washington, or take your time to talk to these gentlemen right here.

This is my transportation subcommittee clerk, Wally Burnett. I was there when he was born in Fairbanks. He does not like to remember that.

And Dan Elwell, who is what we call an extern on our staff, working with me, who is, by the way, an American Airlines pilot, and has really contributed greatly to our understanding of aviation issues in this last period.

Lisa Sutherland, the vice director, deputy director of the Appropriations full committee staff, is here with us also.

If you want to corral someone who will listen, since we are on our way to another meeting, feel free to trip them so that they do not leave too fast.

ADDITIONAL SUBMITTED STATEMENTS

But we do thank you for your courtesy, and again, if you want to add any comments or ask questions about what you—those comments, if you wish them to go into the record must be in our hands by January 7. We have to file this record on January 7 in the Senate.

PREPARED STATEMENT OF THE PROFESSIONAL AIRWAYS SYSTEMS SPECIALISTS

I represent the Professional Airways Systems Specialists for the North Alaska Systems Maintenance Office. Our area of responsibility extends from Barrow to the north, to Gambell in the west, to Eagle in the east, and as far south as Shemya, this includes all National Airspace equipment in between. Since the beginning of Mr. Al Gore's initiative known as reinvention of government, personnel reform, and now the FAIR Act some very disturbing trends are beginning to emerge. Air safety is being measured in dollars rather than in lives saved and accidents prevented. Here in Alaska an initiative known as Corporate Maintenance Philosophy has been undertaken and has been in effect for about three years. New ways of doing business are being experimented with along with a very serious attempt to change a culture. The program started out with a list of six paths to success and a plan including "the nows" and "the futures". The program progressed pretty well for the first year and a half but began to experience difficulty as staffing and money began to go away. When opportunities existed to make capital gains and reinvestment in the existing infrastructure I believe those funds were squandered and when staffing adjustments were made we wound up with a whole lot of folks in the wrong places and there is no political will or decent leadership willing to make the necessary adjustments. I will attempt to describe some events and projects which I feel have failed and in the process have cost millions of hard to get taxpayer dollars.

1. Staffing of the technical workforce which maintains and repairs National Airspace equipment and infrastructure has dropped to dangerously low levels, despite the fact that our overhead staff in the regional office continues to grow, mostly in higher pay grades such as GS–14 and GS–15 levels. Most of these positions provide no direct support to the NAS or the flying public. We have assistants to assistants to assistants and assistants who supervise assistants. The bureaucracy is so bloated

it is no wonder we cannot manage to field new systems in a timely fashion, we can't get out of our own way.

2. Mean time to restore facilities has been on a steady increase as a result of our new Corporate Maintenance Philosophy. Risk assessments conducted concerning this situation have been ambiguous, depending on who conducts the assessment. The Airways Facilities managers contend this is a normal result of the way we are doing business and the Air Traffic managers are concerned about redundant systems being left to run on half a system while Airways Facilities decides whether or not to respond. Whereas we used to respond to facility outages in 24 hours or less our MTR "mean time to restore" numbers are running at 68 hours and more than likely will continue to increase.

3. Our Emergency Operations Facilities have deteriorated to such a state that if we experienced a national disaster or a serious disruption in our existing communication facilities we would not be able to communicate with the vital EOF sites outlined in our emergency plans. Kenai has no operational facility at all, Fairbanks has one resource with very limited backup, and no control on the floor at the AFSS. Juneau has a similar situation to that of Fairbanks. The EOF facility was to be complete a year ago, but has been in a bureaucratic quagmire since the property disposal that took place in Kenai two years ago. HF communications was a vital aspect of the emergency experienced during the 1964 earthquake, our HF capabilities at this time are in a sad state of affairs.

4. We have installed a government owned and operated satellite telephone system here. Despite the fact that the system circumvents the private sector and costs were on an astronomical scale we did it anyway. Litigation continues to this day over the whole affair and the system now has become one of the most labor intensive and biggest drain on resources in our inventory. Training has been barely adequate and scarce at best, there is no relief in sight, instead we are continuing on with a phase 2 of the system. The facilities are known as ANICS.

5. The Microwave Landing System program purchased 26 MLS systems, Alaska was delivered 14 of the 26. There was to be a five year test program with a clause that if the systems proved to be inadequate, they would be replaced with a system "equal to or better than", what is the question? Each system cost the taxpayers $750,000, the Alaskan portion of that acquisition was 10.5 million dollars. Well those systems are off the air more than they are on the air. Most all of the MLS systems were installed, flight inspected, and turned off, placed in care taker status with a 72 hour turn up stipulated. Only one real user in the commercial area was using these that was Reeve Aleutian Airway, the aircraft equipment was supplied by the FAA.

6. We are planning the construction and operation of four new Flight Service Stations in our state over the next year or so, they are at Deadhorse (leased from state), McGrath, Iliamna (leased from private vendor), and Northway. I am not privy to the cost of these facilities but I have reviewed the plans during the engineering process.

I was shocked to learn that the plans for these new "state of the art" facilities included at the heart of the voice switching system components developed in the 1970s, not supportable, and antiquated. When the question was posed to the program managers their reply was equally ludicrous. We have been told that STVS and or ICSS voice switch equipment was not available for installation at the new facilities. Because flight service stations no longer exist in the lower 48 states the program managers in Washington made no provision for acquisition of new voice switch equipment. The voice switch equipment in a facility like a flight service station is the heart of the facility, most everything going in or out of that facility goes through that switch. Why would anyone want to build new facilities around an outdated switching system is beyond me!

7. Our latest effort in modernizing the NAS in Alaska is known as CAPSTONE. I have done some research on its history thusfar and find it to be an innovative development in technology, the subsidiary company of United Parcel Service, IlMorrow Inc. makes the equipment being used for the ADS–B Automatic Dependent Surveillance Broadcast, it also requires other facilities to be a complete system in the NAS. Some of the other facilities are AWOS Automated Weather Observation Systems and some lighting aids. My immediate involvement in the 3 year test project has been with the AWOS systems and already I see cost cutting measures being taken that will hamstring the program right from the beginning. We are currently installing and getting ready to turn on four weather systems in St. Michaels, Holy Cross, Scammon Bay, and Mountain Villiage, with six more coming next fiscal year. These weather observation systems are planned to be placed into service with dial up capabilities only, this will inevitably lead to poor service to the flying public and the system will not possess ADAS Aerospace Data Analysis System capabilities which

is used in surface weather analysis. I view the ADAS connection as critical to the success of these facilities. I fear that by the time the FAA can field, test, and finalize a system like CAPSTONE it will be long obsolete and we will have another boat anchor.

Thank you for this opportunity to submit testimony to you regarding air safety and modernization in Alaska. I encourage you to take a more active role in oversight of our government agencies and their operations. I am grateful for the finding you have secured for the state and the aviation community while Chairman on the Senate Appropriations Committee. Some of our government agencies have become self serving and in some cases out of control, I would hope strong leadership from our congressional delegation will make some effort to curtail this trend.

PREPARED STATEMENT OF AERO TWIN, INC.

First, let it be noted that there is a majority opinion held within the repair station industry that modernization of Part 145 is overdue.

While a few of the revisions to Part 145 proposed by this NPRM are welcome changes (provisions for satellite repair stations and Deviation authority, for example), there are many provisions to which Aero Twin, Inc. strongly objects.

Prior to citing individual paragraphs, we will comment on several primary objections to the proposed amendment to Part 145:

1. Aero Twin, Inc. cannot support a revision that mandates the establishment of internal quality assurance processes that are so ill-defined as to potentially mean anything, up to and including the requirement for ISO 9000 certification for every repair station. Such proposals must be rejected out-of-hand until the FAA deigns to provide some definition of what, specifically, is entailed by the proposed quality assurance system. Advisory material published concurrently with the release of the rule is absolutely inadequate. Further, while Aero Twin, Inc. does not object to the concept of self-auditing, we feel performance of such audits must remain elective. The quality control programs and procedures currently mandated by Part 145 are carefully designed to assure airworthiness; FAA surveillance assures adherence to the programs. While the FAA may have data suggesting that implementation of quality assurance systems enhance quality, it is unclear that the conclusion is readily extended to encompass smaller repair stations, where the additional level of internal oversight would be largely symbolic, yet more costly per employee.

2. The proposed revisions to Part 145 include the creation of an Accountable Manager. We are strongly opposed to this provision. We believe it to be a poorly veiled means to assign liability to an individual within a corporation. A Repair Station is an organizational authorization. Responsibility for assuring adherence to the applicable regulations is the joint responsibility of the organization and the FAA. Requiring one individual to assume all of the responsibilities delegated to the proposed Accountable Manager is outside the scope of FAA function. Each organization seeking Repair Station authorization should retain the right to identify which staff members hold particular responsibilities within the organization, subject to meeting basic qualifications. Daily operation of an organization subject to personnel absences due to vacations, sickness, business travel, etc. requires flexibility not afforded in the FAA's proposal. We would support the creation of a 'Primary Point of Contact' as a means to streamline correspondence and interaction with the FAA.

3. The personnel training requirements proposed by the FAA are not well enough defined to allow a reviewer to judge the benefits or the costs involved. While Aero Twin, Inc. does oppose mandated training requirements in principal, specific information regarding these requirements must be provided if this review is to have substantive meaning. Advisory material published concurrently with the release of the rule is absolutely inadequate.

4. In the proposed revision, in addition to the repair station manual, there is a series of documents that must be prepared and maintained by the repair station, and in some cases forwarded to the FAA district office. We recommend adoption of a consistent language in prescribing the requirements for these documents. The documents include:

—The capability list [ref 145.203]
—The personnel roster [ref 145.157]
—A comprehensive facility description [ref 145.207(c)]
—A list of references to manufacturers' inspection standards for particular articles [ref 145.207(d)(2)]
—A forms manual [ref 157.145.207(d)(3)]
—A vendor list [ref 145.207(h)]

We suggest the following apply to each of the listed documents:

a. These documents should be separate from the repair station manual, included only by reference, and should constitute accepted data, as opposed to approved data.

b. These documents should be maintained by the repair station and submitted to the district office upon revision within a stated period or time following revision, without affecting the status of repair station compliance.

c. The form of submission may be an electronic document accompanied by means to access the electronic copy.

These features are already prescribed for certain documents in the proposed rule (refer to 145.205(e)(2), 145.205(f), 145.207(d)(3)). A consistent system of dealing with these documents will clarify the rule and improve compliance. Separation from the approved manual material is imperative.

5. We are unable to accept the FAA's unsubstantiated cost analysis. The cost of establishing and maintaining a quality assurance system cannot be determined until the system is defined in some detail. The cost of establishing and maintaining a personnel training system cannot be determined until the system is defined in some detail. Both systems are mandated by the proposed rule, yet neither is described in detail sufficient with which to estimate costs.

Aero Twin, Inc. comments to specific paragraphs in the proposed rule: Paragraphs of the proposed rule to which Aero Twin Inc. has no specific comments are omitted.

FAA Section 145.3 Definition of terms

(a) Accountable manager means the manager who has the corporate authority for ensuring that all maintenance, preventive maintenance, and alteration is carried out to the standards required by the Administrator.

Aero Twin, Inc. Response: We object to the mandated creation of this titled position for the aforementioned reasons (see opening comments).

(i) Computer system means any electronic or automated system capable of receiving, storing, and processing external data, and transmitting and presenting such data in a usable form for the accomplishment of a specific function.

Aero Twin, Inc. Response: This definition should be clarified to exclude office systems.

(j) Consortium means the holder of a type certificate that forms a combination or group of separate certificated repair stations to perform maintenance, preventative maintenance, or alteration of that type-certificated product and components thereof, and functions under a single unified quality control and quality assurance system.

Aero Twin, Inc. Response: Aero Twin, Inc. does not agree that consortiums, as defined, should be allowed. In the first, place we oppose the requirement for quality assurance systems which negates the primary purpose of a consortium. In the second place, we oppose the granting of relief to a consortium as it unfairly favors type certificate holders entering the repair station industry.

(n) Maintenance release means a repair station document signed by an authorized repair station representative that states that the article worked on is approved for return to service for the maintenance, preventative maintenance, or alterations performed.

Aero Twin, Inc. Response: We believe the exclusive nature of the scope of 'return to service' should be emphasized by the insertion of the word 'only'. 'Approved for return to service only for the maintenance, preventative maintenance, or alterations performed.' The scope of the maintenance release must not be ambiguous in any way.

FAA Section 145.9 Advertising

(b) No certificated repair station may make any statement, either in writing or orally, about itself that is false or is designed to mislead any person.

Aero Twin, Inc. Response: We do not agree that paragraph (b) belongs in the airworthiness regulations. It is offensive that the FAA presumes to mandate fair and honest business practices. Organizations that would intentionally mislead are unlikely to be converted by virtue of this regulation. Other FAA certificate holders are not under similar regulatory restraint.

FAA Section 145.11 Deviation authority

[all]

Aero Twin, Inc. Response: Aero Twin, Inc. agrees with the provisions for Deviation authority. It should remain a part of the final rule.

FAA Section 145.51 Application for certificate

(a)(3) A statement signed by the accountable manager confirming that the procedures described in the repair station manual are in place and meet the requirements of the applicable Federal Aviation Regulations.

Aero Twin, Inc. Response: Aero Twin, Inc. believes this paragraph should be removed. In the first place, we do not agree with the creation of an Accountable Manager; in the second, we see no need for any separate signed statement. The approval of the required manual by both the repair station and the FAA, and FAA inspection, assures compliance with the regulations. This transparent enforcement clause is unwarranted.

(a)(4) An organizational chart of the repair station and a list of the names and titles of managing and supervisory personnel.

Aero Twin, Inc. Response: Aero Twin, Inc. suggests the deletion of all words after 'repair station'. The requirements of 151.51(b) and 151.157 render this paragraph redundant.

(d) An applicant for a repair station certificate operated by a consortium, which functions as a single organization with regard to quality control and quality assurance, holds an approved type certificate, and performs maintenance, preventive maintenance, and alterations of that type certificated product, must have the consortium's quality control and quality assurance systems in place at each of its facilities.

Aero Twin, Inc. Response: Aero Twin, Inc. does not agree with the creation of consortiums, and thus, is opposed to inclusion of this paragraph.

FAA Section 145.59 Ratings and classes

(a) Aircraft ratings. An aircraft rating on a repair station certificate permits that repair station to perform maintenance, preventive maintenance, or alterations on an aircraft, including work on the powerplant(s) of that aircraft up to, but not including, overhaul as that term is defined in See. 145.3 under the following classes:

(1) Class 1: Aircraft (other than rotorcraft and aircraft composed primarily of composite material) of 12,500 pounds maximum certificated takeoff weight or less.

(2) Class 2: Aircraft (other than rotorcraft and aircraft composed primarily of composite material) over 12,500 pounds maximum certificated takeoff weight and up to and including 75,000 pounds maximum certificated takeoff weight.

(3) Class 3: Aircraft (other than rotorcraft and aircraft composed primarily of composite material) over 75,000 pounds maximum certificated takeoff weight.

(4) Class 4: Rotorcraft (other than rotorcraft composed primarily of composite material) of 6,000 pounds maximum certificated takeoff weight or less.

(5) Class 5: Rotorcraft (other than rotorcraft composed primarily of composite material) over 6,000 pounds maximum certificated takeoff weight.

(6) Class 6: Aircraft composed primarily of composite material of 12,500 pounds maximum certificated takeoff weight or less.

(7) Class 6: Aircraft composed primarily of composite material over 12,500 pounds maximum certificated takeoff weight.

Aero Twin, Inc. Response: The definitions of Classes 1 through 7 are completely dependent upon the interpretation of the phrase 'composed primarily of composite material'. The explanation provided in the NPRM sheds some light on the FAA's intent, but the regulation is vague.

Aero Twin, Inc. concurs that repair of advanced composites requires special training and special equipment, but in the case of aircraft with one or several primary structural elements fabricated using advanced composites, there typically remains a large percentage of aircraft structure and systems which may be adequately inspected, maintained, and repaired by non-specialized techniques and equipment.

Maintenance, preventive maintenance, or alterations of advanced composites should be made permissible by a separate and distinct rating, or be considered a specialized service rating under 145.59(i). In either case the rating should be made applicable to components or substructures (not entire aircraft).

This recommendation would involve removal of the composite exception clause in 145.59 (1) through (5), the removal of 145.59 (6) and (7), the addition of an Advanced Composite Rating in 145.59, in appropriate revisions to 145 Appendix A, and definition of the term Advanced Composite.

With regard to the definition advanced composite, we wish to point out the definition would need to exclude room temperature cure, wet-layup, non-vacuum bagged fairings typical on many light aircraft, but might reasonably include any composite primary structure, regardless of fabrication technique.

FAA Section 145.61 Transition to new system of rating

(a) Except as provided in paragraph (b) of this section, a certificated repair station with a certificate issued before [effective date of the final rule], may exercise the privileges of that certificate until [2 years after the date of the final rule].

(b) A certificated repair station with a certificate issued before [effective date of the final rule] that makes an application to change any portion of that certificate

under Sec. 145.57 must meet all the applicable requirements of this part and apply for and receive approval for each rating under which the repair station desires to exercise privileges.

Aero Twin, Inc. Response: Aero Twin, Inc. does not believe that the proposed two-year transition is realistic. We have experienced FAA administrative delays of six months in obtaining approval of minor revisions to our Repair Station Manual. We cannot believe Flight Standards District Offices will be able to support the concentrated workload of training inspectors, processing of major revisions to the manuals of all repair stations, perform the required inspections, all within the allotted period. If the rule passes as written, the FAA will certainly have to spend additional time and effort in providing for inevitable deadline extensions. We propose that 151.61(a) be amended to allow a five year transition period: '. . . may exercise the privileges of that certificate until [5 years after the date of the final rule].' It follows that the requirements of 145.61(b) are also unrealistic, as it is unlikely that an active repair station can operate for even one year without needing minor revisions to its manual. We therefore recommend that for a two year period following adoption of a final rule, minor revisions to Repair Station Manuals may be adopted and approved without meeting all new applicable requirements.

FAA Section 145.103 Facilities and housing requirements.

[all]

Aero Twin, Inc. Response: Aero Twin, Inc. believes the language of the current 145.53 is adequate to address facilities and housing requirements; we recommend retaining existing language.

FAA Section 145.105 Change of location, housing, or facilities

(a) A certificated repair station may not make any change in this location or any change, deletion, or addition to its housing or facilities, whether the change is a new location, is a substantial rearrangement of space within the present location, or involves moving any of the housing or facilities that are required by Sec. 145.103, unless the change is approved by the Administrator.

(b) The Administrator may prescribe the conditions, including any limitations, under which a certificated repair station my operate while it is changing its location, housing, or facilities.

Aero Twin, Inc. Response: We believe the regulations should provide for a grace period of at least 30 days in the reporting and approval of changes within existing facilities, where such changes do not involve reduction or removal of existing capability, space, etc. The requirement to obtain prior approval will discourage improvement and modernization.

FAA Section 145.151 Personnel requirements

(a) Each certificated repair station must: (1) Designate an individual as the accountable manager;

Aero Twin, Inc. Response: We object to the mandated creation of this titled position for the aforementioned reasons.

FAA Section 145.157 Records of management, supervisory, and inspection personnel

(a) Each certificated repair station must maintain the following:

(1) A roster of management and supervisory personnel, including the names of the repair station officials who are responsible for its management and the names of its technical supervisors;

(2) A roster with the names of all inspection personnel, including the chief inspector;

(3) A roster of personnel authorized to sign a maintenance release for approving an altered or repaired article for return to service;

(4) A summary of the employment of each individual whose name is on the management, supervisory, and inspection personnel roster. The summary must contain enough information on each individual listed on the roster to show compliance with the experience requirements of this part including:

i. Present title;

ii. Total years of experience in type of maintenance work;

iii. Past employment record with names of places and periods of employment by month and year;

iv. Scope of present employment; and

v. If applicable, the type of mechanic or repairman certificate held and the ratings on that certificate.

(b) The rosters must be kept current and reflect changes caused by termination, reassignment, change in duties or scope of assignment, or addition of personnel.

Aero Twin, Inc. Response: Aero Twin, Inc. agrees with the provisions of 145.157, with the caveat that the rosters required by this section must be distinct from the FAA Approved Repair Station Manual to ensure that personnel changes do not immediately render the manual itself invalid. The intent of the proposed rule is unclear. We recommend language be added to provide a fixed grace period of 30 days for reporting changes per 145.157(b).

FAA Section 145.159 Training requirements

(a) Each certificated repair station must have an employee training program that consists of initial and recurrent training and is approved by the Administrator.

(b) The training program must ensure that each employee assigned to perform maintenance, preventive maintenance, or alterations, and each employee assigned to perform inspection functions is capable of performing the assigned task.

(c) Each certificated repair station must document in a form acceptable to the Administrator programs pertaining to individual employee training. Individual training records for those employees who require training under the requirements in paragraph (b) of this section must be retained for the duration of each individual's employment.

Aero Twin, Inc. Response: Aero Twin, Inc. agrees that training is of the utmost importance, but we are unable to meaningfully respond to this requirement in light of the lack of detail in the proposal. We therefore oppose this section until the FAA provides draft versions of the advisory material. Refer to our opening comments.

FAA Section 145.201 Quality assurance and quality control systems

(a) Each certificated repair station must: (1) Establish and maintain a quality assurance system acceptable to the Administrator;

Aero Twin, Inc. Response: We oppose the requirement for quality assurance systems for the aforementioned reasons (see opening comments). We recommend the title of section 145.201 be revised to 'Quality control system', and that (a)(1) and (a)(3) be eliminated (the latter being redundant considering 145.207(d)(1)).

FAA Section 145.203 Capability list

(a) Each certificated repair station must prepare and retain a current capability list acceptable to the Administrator. The repair station may not perform maintenance, preventive maintenance, or alterations on an article until the article has been listed on the capability list in accordance with this section and Sec. 145.207(g).

(b) The capability list must identify each article by make and model, part number, or other nomenclature designed by the article's manufacturer.

Aero Twin, Inc. Response: It is burdensome and unnecessary to require listing each article by make, model, and part number. Listing articles by model series should be allowed, where appropriate. For example, the Cessna 150 was produced as models 150, 150A, 1501B, 150C, 150D, 150E, 150F, 150G, 150H, 150J, 150K, 150L, and 150M. In this case it would be appropriate for the capability list to include 'Cessna Model 150 Series'. This is even more important in the case of instrument, accessory, and propeller rated repair stations, where the list of specific models and/or part numbers could become extremely long, and constant revision to add new listings would be overly burdensome.

(c) An article may be listed on the capability list only if the article is within the scope of the ratings. And classes of the repair station's certificate, and only after the repair station has performed a self-evaluation in accordance with Sec 145.207(g). The repair station must perform the self-evaluation described in this paragraph to determine that the repair station has all of the facilities, equipment, material, technical data, processes, housing, and trained personnel in place to perform the work on the article as required by Part 145. If the repair station makes that determination, it may list the article on the capability list.

(d) The document of the evaluation described in paragraph (c) of this section must be signed by the accountable manager and must be retained on file by the repair station.

Aero Twin, Inc. Response: We do not accept the creation of an Accountable Manager, therefore we object to paragraph (d). We propose the Repair Station designate staff members with authority to sign capability evaluation reports; that designated authority would be documented as part of the roster required by 145.157. The FAA's review and acceptance of the roster would confer acceptance of the designated signature authority.

FAA Section 145.205 Repair station manual

(a) Each certificated repair station must prepare, keep current, and follow and approved repair station manual for the ratings authorized that is consistent with the size and complexity of the repair station.

(b) The certificated repair station manual must:

(1) Set forth the procedures and policies approved by the Administrator for the repair station's operation in accordance with the requirements of this part; and

(2) Be followed by the repair station's personnel while conducting station operations.

(c) Each certificated repair station must maintain at least one copy of its current manual at its facility.

(d) A copy of the repair station's current manual must be made readily available to repair station personnel required by subpart D of this part.

(e) The repair station must provide to the certificate holding district office:

(1) A current paper copy of the repair station manual; or

(2) A current electronic copy of the repair station manual that is accompanied by the means to access the electronic copy.

(f) Except for changes to the capability list, each revision to the repair station manual must be submitted to the Administrator for approval.

Aero Twin, Inc. Response: We believe the capability list should be separate and distinct from the repair station manual. The proposed rule is clear in its intent that the capability list is not FAA-approved; we suggest that paragraph (f) be revised by striking the words 'Except for changes to the capability list'.

FAA Section 145.207 Repair station manual contents

Each certificated repair station's manual must include the following:

(a) An organizational chart containing the name of each management employee who is authorized to act for the repair station, the employee's assigned area of responsibility, and the employee's duties, responsibilities, and authority;

Aero Twin, Inc. Response: We do not agree that the organizational chart included in the repair station manual should include names of the individuals holding each position. The personnel roster required by 145.157 will include the names of repair station staff members. We suggest replacing the word 'name' with 'title'.

(c) A description of the certificated repair station's operations, including a description of the facilities, equipment, material, and housing as required by subpart C of this part;

Aero Twin, Inc. Response: The requirements of subpart C, particularly as written in the proposed rule, are too comprehensive for inclusion in the repair station manual. A facility diagram is sufficient. We suggest that paragraph (c) should read: 'A diagram of the certificated repair station's facilities'. If a comprehensive description of the certificated repair station's operations, including a description of the facilities, equipment, material, and housing as required by subpart C of the proposed rule, is to be required, it should be separate and distinct from the repair station manual (accepted data, not approved data).

(d) An explanation of the certificated repair station's quality assurance system, including:

(1) The quality control system;

(2) References, where applicable, to the manufacturer's inspection standards for a particular article, including reference to any data specified by that manufacturer;

(3) A sample copy of the inspection forms and instructions for completing such forms or a reference to a separate forms manual;

(4) Procedures for updating the capability list required by Sec. 145.203, including notification of the certificate holding district office; and

(5) Procedures for the implementation of corrective actions for any discrepancies found by the quality assurance system.

Aero Twin, Inc. Response: We believe paragraph (d) and its sub-paragraphs need substantial revision: We do not agree with the requirement for a quality assurance system (see opening comments) nor do we believe the references of subparagraph (2) should be included in the body of the repair station manual; a list of such references, if required, should be separate from the manual (accepted data, not approved data). We suggest that (d) be revised to read:

(d) An explanation of the certificated repair station's quality control system, including:

(1) A sample copy of the inspection forms and instructions for completing such forms or a reference to a separate forms manual;

(2) Procedures for updating the capability list required by Sec. 145.203, including notification of the certificate holding district office; and

(3) Procedures for the implementation of corrective actions for any discrepancies identified by internal or external review.

(g) Procedures for self-evaluations, including methods and frequency of such evaluations, and procedures for reporting results to the accountable manager for review and action;

Aero Twin, Inc. Response: We do not agree with the need for a quality assurance system nor with the creation of an Accountable Manager. Absent the requirement for a quality assurance system, we do not oppose the inclusion of self-evaluation procedures; we suggest (e) be revised to read: 'Procedures for self-evaluations, including methods and frequency of such evaluations, and procedures for documenting and reporting results'.

(h) A list of the maintenance functions contracted to an outside facility with: (1) The name of the facility; (2) The type of certificate and ratings, if any, held by such facility; and (3) Procedures for qualifying and surveilling the facility and for accepting maintenance, preventive maintenance, or alterations performed by the facility;

Aero Twin, Inc. Response: This list, which we refer to as a vendor list, should be separate from the repair station manual (accepted data, not approved data). In the case of FAA certificated facilities, subparagraph (3) should not apply, as those facilities are already subject to FAA verification of an approved quality control system.

(k) The repair station's capability list;

Aero Twin, Inc. Response: The capability list should be separate from the approved manual material. We suggest striking this paragraph.

FAA Section 145.211 Inspection of maintenance, preventive maintenance, or alterations performed

(a) A certificated repair station must inspect each aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof upon which it has performed maintenance, preventive maintenance, or alterations as described in paragraphs (b) and (c) of this section before approving that article for return to service.

(b) Each repair station must certify on an article's maintenance release that the article is airworthy with respect to the maintenance, preventive maintenance, or alterations performed after;

(1) The repair station performs work on the article; and

(2) A qualified inspector inspects the article on which the repair station has performed work and determines it to be airworthy.

Aero Twin, Inc. Response: There must be no ambiguity in this section with regards to the scope of the inspections and maintenance release. The required inspection and maintenance release must apply only to the work performed and this limitation must be very clearly stated in the final rule. We believe this is the intent of the words 'with respect to' in paragraph (b); however, similar wording is omitted in (b)(2), leaving open the interpretation that the qualified inspector must determine airworthiness of the complete article, not limited to the work performed. We suggest that (b)(2) be revised to read 'A qualified inspector inspects the article and determines it to be airworthy with respect to the maintenance, preventive maintenance, or alterations performed'.

FAA Section 145.213 Contract maintenance

(a) A certificated repair station may not contract a job function to another certificated repair station unless:

(1) The contracting repair station meets the quality control and inspection system requirements of 145.201(a)(2) and 145.209(c)(2), and

(2) The contracting repair station's approved repair station manual contains the information and procedures specified in 145.207(h).

Aero Twin, Inc. Response: It is wrong to assume that 'another certificated repair station' may not meet the basic requirements for certification, and that the contracting repair station is responsible for making that determination. The FAA is responsible for making approved determination. All of (a) should be eliminated from the proposed rule.

(b) A certificated repair station may not contract a job function to a noncertificated person unless:

(1) The certificated repair station meets the quality control and inspection system requirements of 145.201(a)(2) and 145.209(c)(2);

(2) The certificated repair station's approved repair station manual contains the information and procedures specified in 145.207(h);

Aero Twin, Inc. Response: It is wrong to assume that a certificated repair station may not meet the basic requirements for certification. Paragraphs (b)(1) and (b)(2) should be eliminated.

FAA Section 145.215 Privileges and limitations of certificate

(a) A certificated repair station may:

(1) Perform maintenance, preventive maintenance, or alterations only on any aircraft, airframe, aircraft engine, propeller, appliance, component, or part thereof for which it is rated;

(2) Arrange for the maintenance, preventive maintenance, or alteration of any article for which it is rated at another organization only if that organization is under the quality control system of the repair station, as prescribed by Sec. 145.201(a); and

Aero Twin, Inc. Response: Paragraph (a)(2) is contrary to the provisions of proposed 145.213. We suggest (a)(2) read: 'Arrange for the maintenance, preventive maintenance, or alteration of an article for which it is rated at another organization under the conditions of 145.213.

FAA Section 145.219 Reports of defects or unairworthy conditions

(b) Each certificated repair station must report the defect or unairworthy condition it discovers to the Administrator on a form and in a manner prescribed by the Administrator. The report must include as much of the following information as is available:

(1) Type, make and model of the aircraft, airframe, aircraft engine, propeller, appliance, or component part;

(2) Name and address of the operator;

Aero Twin, Inc. Response: We believe (b)(2) should be eliminated. Further, we believe compliance with the provisions of 145.219 will be enhanced by this elimination.

Appendix A to Part 145—Job Functions

[all]

Aero Twin, Inc. Response: As previously stated, Aero Twin, Inc. believe that aircraft classes 6 and 7 should be eliminated and a distinct rating for advanced composites be created. This would necessitate appropriate revisions to Appendix A.

End of comments to specific paragraphs of the proposed rule——————————————

In summary, Aero Twin, Inc. hopes that the FAA, in quantifying the benefits of this proposal, has considered that, due to increased overhead, many small repair stations will be economically unable to comply with the proposed requirements for extensive new internal processes and record-keeping. The market in general aviation maintenance will swing in favor of individual repairmen; repair stations will surrender certificates to work in that less-overburdened regulatory environment. As a result, a large portion of GA maintenance will move out from under the light of current FAA repair station surveillance and into the darker corners of ramps and tee-hangars nationwide.

PREPARED STATEMENT OF SECURITY AVIATION

It would appear that the tendency of the Anchorage FAA Flight Standards District Office (FSDO) is more of a "we are here to help you" attitude than enforcement. Perhaps the reason is that it is literally impossible for an inspector to one day come in, drink your coffee, maintain a friendly relationship and then the next day objectively investigate a violation or accident of the same operator. The FAA should consider creating enforcement officers, a section completely separate from the regular FSDO inspectors. In addition to investigating and prosecuting pilots and operators these enforcement officers should be in the field making sure that all operators are playing by the same rule book. Eliminate the personal relationships. An FSDO inspector cannot do both.

The FAA continues to allow air charter companies who have had numerous violations, accidents, injuries and fatalities to continue operating. Some of these operators have been banned by the Department of Defense (DOD) who will not allow military or civilian personnel to travel on these carriers. The FAA flight standards district office receives the DOD reports but still allows these operators to continue transporting the general public, who assumes because they are licensed by the FAA they have to be OK. Why is the general public not afforded the same safety standards that a PFC, Colonel or GS–15 civilian is afforded?

Why is the FAA not doing press releases on pilot and operator violations and accidents? Is it true that a journalist or reporter must obtain violation and legal proceedings information from the FAA under the Freedom of Information Act? Very few of the traveling public has access to information that will influence who they fly with. Who you fly with should be just as important as the grocery store, restaurants, or lawyers that you may use, all of whom publicize their inspections or findings.

PREPARED STATEMENT OF THE ALASKA AVIATION COORDINATION COUNCIL

The undersigned members of the Alaskan Aviation Community wish to express our appreciation for the aviation hearings in Anchorage on December 14, 1999. After careful consideration of testimony thus far, we would like to add the following comments and clarifying information to the record.

We believe that Alaska aviation interests share a common vision of Alaska aviation infrastructure needs and that it is clear from existing testimony that Alaska is unique in its reliance on aviation for its most basic transportation needs. Three points of clarification may need to be made regarding testimony given:

First, the need for airport and aviation infrastructure improvements is clear and the cited $265 million in airport improvements over the next five years is in addition to the historic $80 million in annual Airport Improvement Program funding that now comes to Alaska.

Second, the cited 20-year window for Capstone avionics to broadly affect aviation safety refers not to the efficacy of Capstone, but rather to the fact that until virtually all aircraft are equipped with 'Capstone' type avionics, Capstone will not be able to provide all the safety benefits it promises to. Obviously, interim, incremental improvements will be most welcome and statewide implementation of Capstone is strongly endorsed.

Third, due to the scope and dynamic nature of aviation and Alaska, more aviation related issues will arise and our concern is that the present nationally driven FAA methodology of addressing these concerns does not serve Alaska aviation safety as well as it should. Alaska is often detrimentally impacted by well meaning federal regulatory reaction, to issues occurring elsewhere, with a "one size fits all" solution. A brief sampling of recent national mandates that have failed or are failing to improve aviation safety in Alaska follow (specifics for which are attached):

—Outdated FAA requirement to re-equip transponder equipped aircraft in Alaska, for which a petition for exemption (FAA Docket 29537) is languishing.
—FAR Part 135 to Pt. 121 transition for commuter carriers, that effectively forced some remote Alaskan markets to smaller, non-pressurized aircraft.
—The Single Engine Instrument Flight Rule (SEIFR) re-write that effectively eliminated SEIFR.
—A historic eastbound departure procedure from Juneau International Airport revised to now uneconomic usage.
—Long standing Ketchikan Revilla corridor flight procedures cancelled.
—Aging Aircraft NPRM 99–02 that will effectively shut down most intra-Alaskan Part 121 and Part 135 scheduled operations.

With national focus programs driven from a remote FAA headquarters in Washington, D.C., policy makers often fail to understand the actual impact of their decisions on basic safety. At other times, locally identified and pursued safety concerns, lacking a national focus, fail to get proper consideration and are either ignored or brushed aside without regard to existing procedure.

For these reasons, we feel it important to fundamentally change the way Alaskan aviation interests and FAA communicate and work together to resolve safety concerns. Toward this end, we would again cite the (attached) Alaska Aviation Coordination Council's Strategic Plan, specifically the recommendation to create a formal "Alaskan Federal Aviation Advisory Council" to the Alaskan Region FAA. This Advisory Council would provide continuous safety and user need assessment to ensure effective planning and development. Presently, no formal communication mechanism exists between the FAA and the aviation community at large to ensure effective feedback and/or advice in planning programs or resolving issues and informal processes lack the structure and authority necessary to ensure follow-up and accountability. Pursuant to this end, we have also asked FAA Administrator Jane Garvey to authorize the FAA Alaska Regional Administrator to address local issues in the best interest of Alaskan aviation safety, including, if need be, authority to waive or modify regulations as necessary to address specific Alaska aviation issues.

Again, we thank you for your tireless pursuit of a safe, efficient, and reliable air transportation system that meets the needs and enhances the health and welfare of all Alaskans.

PAUL BOWERS,
A.E.E., Chair, Alaska Aviation Coordination Council.
JOHN PRATT,
AK Field Representative, Seaplane Pilots Association.
TOM WARDLEIGH,
Chairman, Alaskan Aviation Safety Foundation.

RICHARD HARDING,
Operations, Peninsula Airways.
BOB HAJDUKOVICH,
President, Frontier Flying Service.
GARY BENNETT, JR.,
General Manager, Northern Lights Avionics.
ROBERT JACOBSEN,
President, Wings of Alaska.
JIM HILL,
Pilot, Alaska Airlines.
ARTHUR WARBELOW,
President, Warbelow's Air Ventures, Inc.
FRED H. CIARLO,
General Manager, Tanana Air Service.
RONALD W. HANEY,
Interim Chair, Aviation Technology, UAA.
LEONARD KIRK,
President, Leonard Kirk Aviation Training.

ANECDOTAL EXAMPLES OF FAA NATIONAL DIRECTION THAT DOES NOT SERVE ALASKA AVIATION SAFETY

Alaska is often detrimentally impacted by well meaning federal regulatory reaction, to issues occurring elsewhere, with a "one size fits all" nationally driven FAA solution that do not serve Alaska aviation safety as well as they should. Following is a brief overview sampling of recent national mandates that have failed or are failing to improve aviation safety in Alaska:

—Most transponder equipped aircraft in Alaska have still useful Mode A/C compatible equipment, not thrice as expensive Mode S equipment. Due to nationally proposed infrastructure upgrades, however, FAA national regulations were changed years ago to require air taxi aircraft replacing worn out equipment to do so only with more costly Mode S equipment. The proposed FAA NAS infrastructure upgrades never occurred and are now in doubt, without which there is no benefit to Mode S equipage in small aircraft in Alaska. For this reason, many operators of aircraft with worn out Mode A/C transponders are simply removing them from service rather than replacing with expensive Mode S. Conversely, although Alaska trails the nation in radar coverage, larger aircraft are increasingly equipping with TCAS, which alerts pilots to the presence of any transponder-equipped aircraft, Mode A/C or Mode S. Erosion in the number of transponder equipped aircraft is a safety issue.

Petitions for exemption (FAA Docket 29537) from this requirement on behalf of all affected Alaskans seems to have been brushed aside without processing per the FAA's own rules (FAR Part 11) and with apparently no understanding of the issues involved.

— The nationwide, congressionally mandated FAR Part 135 to Pt. 121 transition for commuter carriers, that effectively forced smaller operators to revert from pressurized small twin aircraft to nonpressurized single engine aircraft, because the two-pilot and other regulatory burdens of Pt. 121 compliance made the larger aircraft uneconomic in some remote Alaskan markets.

—The Single Engine Instrument Flight Rule (SEIFR) re-write that was intended to enable Alaskan air carriers utilization of IFR capable single engine aircraft, but which rule finally came out effectively making it uneconomic to operate SEIFR and it removed the limited SEIFR procedures previously available to Part 135 operators.

—The long standing, historic east-bound 'Lemon Creek Departure' procedure from Juneau International Airport, developed and safely used without incident by Lockheed Constellations, DC–6s, Boeing 707s, B–720s, B–727s, B–737–100s, 200s, 300s, 400s: all in concert with and fully approved for use by Alaska Region FAA, until a change in FAA staff and national interest review found this long standing local procedure 'unsafe'. Present procedure modifications now impose significant, cost-inefficient load restrictions on Pt 121 operators who opt to use it.

—Ketchikan Revilla corridor flight procedures involving SVFR and IFR coordination, wherein longstanding Air Traffic procedure separating SVFR floatplane operations could be conducted in the channel simultaneously with IFR operations at the airport, with aircraft separation assured by altitude restrictions. With

new Alaska Airlines RNP minimums and availability of approaches to Runway 29, FAA ATC issued notice that simultaneous operations will be cancelled effective 02/28/00.

—Aging Aircraft NPRM 99–02 would mandate a transport category oriented Damage Tolerance (DT) inspection program for all multi-engined 14 years or older aircraft used in Part 121 and Part 135 scheduled operations. This would apply to nearly every intra-state operation in the State of Alaska, affecting over 700 aircraft that were not designed to undergo such inspections, Alaskan operators note this proposal is not only cost prohibitive, but implementing a DT inspection program could in itself make airworthy components or structures un-airworthy. (Multiple requests to have this NPRM rescinded have been submitted by users.)

SUBCOMMITTEE RECESS

Senator STEVENS. So I thank you all for being here and recording our testimony.

Thank you very much.

[Whereupon, at 4:20 p.m., Tuesday, December 14, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

THURSDAY, FEBRUARY 3, 2000

U.S. SENATE,
COMMITTEE ON THE BUDGET AND COMMITTEE
ON APPROPRIATIONS, SUBCOMMITTEE ON
TRANSPORTATION AND RELATED AGENCIES,
Washington, DC.

The committees met jointly, at 10:08 a.m., in room SD–608, Dirksen Senate Office Building, Hon. Pete V. Domenici (chairman of the Budget Committee) presiding.

Present: Senators Domenici, Shelby, Grassley, Gorton, Snowe, Abraham, Lautenberg, Conrad, and Durbin.

JOINT OVERSIGHT HEARING ON MODERNIZING THE FEDERAL AVIATION ADMINISTRATION: CHALLENGES AND SOLUTIONS

DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

STATEMENT OF JANE F. GARVEY, ADMINISTRATOR

ACCOMPANIED BY JACK BASSO, ASSISTANT SECRETARY FOR BUDGET AND PROGRAMS

OFFICE OF INSPECTOR GENERAL

STATEMENT OF KENNETH M. MEAD, INSPECTOR GENERAL

OPENING STATEMENT OF SENATOR SLADE GORTON

Senator GORTON [presiding]. If we can get you seated, we will begin. The meeting will come to order.

In the temporary absence of Senator Domenici, the chairman of the Budget Committee, he has asked me to open. He has an opening statement here that expresses my views exactly and I think outlines what we are about here today. So I will present it, but the record can show that it is his opening statement with which I am associated.

There are two committees that are represented here this morning and two panels of witnesses. There are going to be a lot of questions, so witness time is going to be limited. We will introduce the first panel, and once they have completed their statements and our questioning, we will move immediately to the second panel.

First we will hear from the FAA Administrator, Jane Garvey. She is accompanied by Jack Basso, Assistant Secretary for Budget and Programs and CFO for the Office of the Secretary of Transportation. Following the Administrator's testimony, we will hear from Kenneth Mead, the Department of Transportation's Inspector General.

Madam Administrator—and these are Senator Domenici's words—I know how difficult this week has been for you and your staff. Whatever you want or can say about the Air Alaska tragedy, please feel free to comment this morning. Whatever is said here today, let me be very clear—and this is not a partisan issue—safety should always be priority number one. As you can well imagine, this comes very close to me.

Ms. GARVEY. Yes.

Senator GORTON. Many of my constituents were involved in that tragedy, and I have always had a particular warm spot in my heart for Alaska Airlines. It is a very heart-breaking experience for all of us who are from Seattle.

Let me also say what this hearing is not about. It is not about the President's budget for the FAA next year. We are going to get those numbers on Monday. Should the Administrator want to discuss those numbers, of course, she is free to do so. But that is not a part of our hearing request.

Second, it is not about the current ongoing FAA reauthorization conference. That conference I hope will be completed soon. We want to focus on the future of air transportation in this country. We are all aware of the growth in the number of airline passengers, and we have become increasingly aware of airline delays. One reason often given for these delays and associated costs to the traveling public has been the argument that our air traffic control system is incapable of meeting the new demands due to outdated systems and old technologies. And yet we know that the Federal Government has spent more than $30 billion for FAA's modernization program since 1983.

This oversight hearing then asks the basic question: With this level of spending and more planned increases, why are we still experiencing problems? We must step back and ask ourselves if the government's organizational structure for our air traffic control system is appropriate for the challenges of the new century. Are there different legislative approaches to funding the air traffic control system apart from the airlines taxes, trust fund, and general fund approach we have used over the past three decades?

Other countries—and we will hear from the Canadian government—have moved toward a more commercial approach to air traffic control. Should we consider that approach and would it even work here in the United States?

These are the kinds of questions that I hope we will deal with today. But I can't avoid on my own adding my compliments to the Administrator. Jane Garvey and I have gotten to know each other quite well since she has taken that position. We flew together on New Year's Eve over the Y2K non-event, very happily, and I have great admiration for the job she has done as Administrator under very real difficulties. She and her agency are, of course, a long way

from being out of the woods, but I do want to compliment her on a job well done so far.

Ms. GARVEY. Thank you.

Senator GORTON. With that, Senator Lautenberg.

OPENING STATEMENT OF SENATOR FRANK R. LAUTENBERG

Senator LAUTENBERG. Thank you very much, Mr. Chairman. It is a pleasure to have you operating in this position, not that I don't miss Senator Domenici, but I think since you and I have some common interests in railroading and other things, life could get easier. But we are pleased to see Jane Garvey and meet Assistant Secretary Basso here this morning.

I came to the Senate with a deep interest in transportation. Though I was running a company in the computer service business, much of my interest emerged in transportation as a result of some public service I was doing as a Commissioner of the Port Authority of New York and New Jersey. The Port Authority is quite an agency. They operate three major airports: Newark, La Guardia, and Kennedy airports in the region. They also have a general aviation airport called Teterboro, which gets a lot of traffic.

And so I was fairly much focused on transportation problems. My company experienced them on the roads, and I had some significant exposure because the Port Authority also owned a railroad called the PATH.

Then, as now, the Port Authority controlled these airports and is responsible for all capital investments in those airports, not to mention investments also in the seaport, and as I indicated, in other services as well, including bridges, tunnels, and you name it in the transportation area.

I became familiar with the critical importance of transportation investments during that period of time, and I also learned that one thing we must do—and the Port Authority was quite an example—is to make investments in a balanced way. As I indicated, we had bridges, tunnels, had an awful lot of automobile traffic, bus terminals, the railroad, and, of course, the airports.

So I came to realize that when funds are not allocated intelligently, more than money is wasted. Time is wasted, critical time during which highways and runways just become more congested.

Mr. Chairman, I believe, like many of our colleagues, that increased investment in aviation is necessary. There is no question about it. But in all our discussions and debates during the last couple of years on how we should provide that increased investment, not enough has been said about how we ensure that these investments are made for the best interests of the traveling public. Not enough has been said how we ensure that other needs of our transportation system are adequately met.

And I am pleased to be here with my friend and colleague of almost all the years that I have been here in the Senate, Senator Shelby. Senator Shelby has my job on the Transportation Subcommittee. He is the chairman. But I have allowed him to take over these years. I am the ranking member, and the chances of a change that I can feel are not very good.

Not enough has been said about whether the current system through which we finance aviation investments is indeed the best system.

As a long-time observer of the spending practices at the FAA, I can tell you that there have been too many instances of time loss and waste. And our current Administrator, FAA Administrator Jane Garvey, deserves a great deal of credit for her efforts at bringing these problems under control.

We must not repeat the mistakes of the past. We must not allow air traffic control procurement programs to be micromanaged or mismanaged. We can't just blindly throw billions of dollars at our Nation's airports and expect the congestion to disappear. We can't just throw billions of dollars at our aviation equipment manufacturers and expect an efficient, state-of-the-art system to emerge at the other end. We need to take aggressive efforts to see that investments are being made intelligently, that money is not being wasted, and that the FAA is being governed by the most modern and sound management practices and the equipment that is consistent with the technological age in which we now live.

Mr. Chairman, over 4 years ago, Chairman Mark Hatfield and I championed a provision that we hoped would go a long way toward reforming the FAA. In a classic case of legislation on an appropriations bill, we provided the Federal Aviation Administration with the broadest and most far-reaching authority to reform its personnel and procurement systems. For years, we had been told that the Federal Government's personnel rules were inconsistent with the flexibility that FAA needed to maximize its potential. And I worked very hard on that, as did Senator Hatfield.

We were also told that the Federal Government's procurement rules were hampering FAA's ability to modernize the Air Traffic Control System in an efficient and affordable manner. So in just a few paragraphs of an appropriations bill, we gave the FAA the widest possible permanent exemption from all these rules. Four years later, however, it appears that these authorities have barely been used.

So when we see an agency that doesn't find a way to fully utilize all the tools at its disposal, we need to question whether the time is right to dramatically increase the level of spending. And this goes with particular criticism directed to Ms. Garvey and her team. It is a big, complicated agency, and it needs incremental steps, as I see it, to get things done. You can't change it overnight.

We also have to consider who will pay for a dramatic new cash infusion into the FAA. I said it earlier: We must maintain an appropriate balance in executing our transportation investments. Current proposals to provide an ironclad guarantee for future aviation spending at levels well beyond the amounts collected into the trust fund will necessarily require funding reductions in other areas of transportation and other areas of the domestic budget.

Since the inception of the Airport and Airways Trust Fund, Congress has appropriated roughly $65 billion more for aviation than has been collected into the trust fund. I repeat, $65 billion since the inception of the airport and airways trust fund has been spent on aviation that—or appropriated than has been collected.

So now we are facing proposals to guarantee even larger appropriations of non-trust fund dollars for aviation, general fund dollars that could otherwise be used to fund things like agriculture and education and health research and defense or any other part of the budget.

If the Transportation Subcommittee is going to be required to absorb all of the cuts necessitated by an aviation guarantee, then we will surely be heading toward a transportation bill that is out of balance. And as we review the current situation with the Alaska Airlines crash, it is both tragic and ironic that the two agencies that are engaged in the recovery and the investigation, the people we are looking to for advice and information, the Coast Guard and the National Transportation Safety Board, are two of the agencies that might have to endure severe funding cuts in order to pay for a guaranteed increase in FAA funding.

Now, no one is talking about granting these agencies a funding guarantee. And as I have pointed out many times before, if funding for Amtrak is cut, services in the Northeast corridor are terminated, we will have to add over 10,000 additional DC–9 flights a year between Washington and New York and Boston, and that kind of service will be felt across this country. Whether it is Albuquerque or Los Angeles or what have you, you are going to feel it if we have to add that much extra capacity to the airplanes filling the air lanes. There simple is not the capacity to handle that many flights in what is already the most congested air space in the world.

But, again, its effects are not limited to just that space. So we have got to consider the full ramifications of providing guaranteed increases in aviation spending at levels well beyond those paid into the trust fund, and such a plan that we see overhanging could well produce some grossly inefficient and destructive results.

And I thank you, Mr. Chairman. You have aged since you took this chair a little while ago.

Senator DOMENICI [presiding]. OK. Let me just talk for a minute about how we might proceed. You all know that this is a joint hearing, and we have the chairman of the Appropriations Subcommittee here sitting at my left. The problem is that a joint hearing brings a lot more Senators, and also you have to understand that we have two sets of panels, and nobody wants to be here until 1:00 or 2:00 this afternoon. I hadn't planned to be either. In addition, the leadership has scheduled one vote in the middle of this, but we will try to not close down. So I am going to try to keep the opening statements down in terms of either how long and how many, but I think it is absolutely imperative that I do let the chairman of the subcommittee make an opening statement. Then we will proceed and hear from the witnesses and then we will use our time for opening statements as part of our questioning.

Senator Shelby.

OPENING STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. Thank you, Mr. Chairman. I will try to be brief, but I think this is a very important hearing, and I commend you for bringing it together.

I would like to thank the panelists for making the time to come testify today before these two committees of the Senate. I know that administration officials and industry representatives do not always relish testifying before either the Budget or the Appropriations Committees because our jobs are sometimes to minimize the amount of the taxpayers' money that must be spent on the functions of government and to make trade-offs among competing programs.

I would also like to thank again the chairman of the Budget Committee, a member of the Transportation Appropriations Subcommittee, which I chair, for scheduling this joint hearing and including my subcommittee. I think this hearing presents a unique opportunity for us to discuss the public's commitment to aviation and the challenges and pitfalls facing the FAA as we continue to modernize the Air Traffic Control System and the National Air Space System and to develop the procedures and the workforce to meet the government's evolving role in aviation.

My hope today is that we can explore two broad but simple questions. One, what are the aviation challenges that must be solved? And, two, what are the potential ways to meet those challenges?

I am mindful of the old axiom that to a hammer every problem looks like a nail, but I have a hard time believing that the solution to every problem at the FAA or in the aviation industry is more money. I know money is important, but it is not the answer to everything.

My research shows that the FAA's appropriation has grown by 230 percent over the last 20 years, while operations handled by the FAA have grown by only 22 percent over the same period. As part of this discussion, I also hope that we can get a better sense of what use the FAA has made of the procurement and personnel reform authority that Congress granted that agency a few years ago. Unless I am mistaken, I believe that the FAA has the greatest flexibility in procurement and personnel of any Federal agency. Yet my sense is that the same problems that plagued the agency 20 years ago and $28.8 billion of procurement dollars are the same ones that plague them today. I would hope that we could have a very candid—very candid, Ms. Garvey—and focused discussion on whether throwing more money than we already do at the FAA is likely to result in a commensurate improvement in air traffic control efficiency and modernization. To this point, that formula has not worked.

Twelve years ago, the Reagan Commission on Privatization noted, and I quote,

> that as airline deregulation moves into its second decade in the United States, the National Air Transportation System faces tremendous challenges. Dissatisfaction over consumer service is apparent in the record number of complaints received by the U.S. Department of Transportation, the flurry of news media attention recently directed toward American aviation, and the voluminous aviation legislation introduced in Congress during 1987.

We only need to change the date to make that an accurate statement for the current state of the Air Transportation System. The concerns expressed in that report in 1987 about the difficulties and deficiencies impairing the efficient operation of the system are as valid today, I believe, as they were in 1988.

Clearly, the problems are persistent and structural. Generally, problems of this nature are not overcome by being overlooked. Insulating FAA funding from competing with other Federal programs will exacerbate the problem rather than remedying the real challenges that must be addressed as we continue to lead the world into the next generation of air navigation, surveillance, and airport and airway safety systems.

Is there a crisis in aviation? If there is, I believe it is the same crisis that we have struggled with for the past 20 years: not enough land-side capacity and how to manage the disruption caused by inclement weather on airport operations that cascade throughout the National Aviation System.

Clearly, there is not enough money in any trust fund, in any agency department or Federal budget to change the weather. The FAA Administrator has explained the relationship between weather—thunderstorms, snowstorms, and their aftermath and delays in the system.

Is capacity a problem? It is not a problem at the vast majority of airports across the country, but it is a problem in some of the airports near major population centers. Unfortunately, aviation projects in those places tend to be some of the most expensive, environmentally contentious, and locally controversial. It is often difficult to convince local communities that longer or more runways, high-speed taxiways, or other aviation investments that will facilitate more aircraft flying above their homes and communities is good for them, even if it is in the national interest.

As a practical matter, I believe that the greatest capacity improvements in the short term are likely to come from improved approaches made possible by GPS technology and better utilization of existing pavement through improved sequencing and coordination of flights. To read some of the recent news accounts, you would think that lavishing more money on the FAA would solve just about every problem that ails us. If you miss a flight, it is because there isn't an aviation firewall. If airports are shut down by a line of thunderheads, it is because there isn't an aviation firewall. If the stock market is off, it is because there isn't an aviation firewall. It goes on and on.

I will state categorically here that recent air tragedies would not have been averted by an aviation firewall. I wish it was that simple. The airlines will continue to cancel flights due to mechanical problems and the scheduling considerations dictated by reduced fleet size even if there is an aviation firewall, and, most importantly, weather disruptions will not go away even if there is an aviation firewall.

I ask that a paper and an update from the Heritage Foundation about budget treatment of aviation accounts be placed in the hearing record at this point, Mr. Chairman.

Senator DOMENICI. Without objection.

[The information follows:]

[From the Heritage Foundation Backgrounder, July 9, 1999]

MOVING AVIATION TRUST FUND "OFF BUDGET" UNDERMINES THE BUDGET PROCESS

(By Ronald D. Utt, Ph.D., and Gregg Van Helmond)

On June 15, 1999, the House passed H.R. 1000 (the Aviation Investment Reform Act for the 21st Century, or AIR 21), to reauthorize the Federal Aviation Administration (FAA) through fiscal year 2004 and to increase significantly federal spending in support of commercial aviation.[1] To make room for this additional spending in a federal budget in which total spending is tightly limited by congressionally approved "caps," Title IX of AIR 21 would move all spending and revenues of the Airport and Airway Trust Fund "off budget." As a result of this proposed change, federal aviation spending would be exempt from all congressional budget control mechanisms and would receive a level of protection now provided only to Social Security. Spending control mechanisms that no longer would be applicable to aviation spending if the aviation trust fund were moved off budget include budget caps established by the Balanced Budget Act (BBA) of 1997, pay-as-you-go rules, annual congressional oversight and review, and other statutory budget limitations.

Although the House passed AIR 21 by a veto-proof majority, it is not at all certain that the Senate is prepared to accept aviation spending plans of this magnitude or a change in the budgetary treatment of trust fund spending. Indeed, now under consideration in the Senate is a significantly different proposal to reauthorize the FAA: S. 82, introduced by Senator John McCain (R-AZ), which would authorize much less spending than H.R. 1000, and make no change in aviation's on-budget status. Because the FAA's current authorization expires this August, considerable pressure will be placed on the Senate to match the level of spending, and the special off-budget privilege, passed by the House.

Advocates of the proposal to move aviation spending off budget argue that this special privilege would protect the tax revenues generated by the airline industry and airline passengers from being diverted to non-aviation spending, tax relief, or debt reduction. And because none of the existing congressional spending limitation efforts and mechanisms apply to off-budget spending, this privilege also would allow Congress to raise future aviation spending substantially above levels that would be permitted for such other, unprotected programs as national security, health care, and law enforcement. If ultimately adopted by Congress and signed into law, such a change would be a major setback in Congress's long struggle to control spending, reduce taxes, and balance the budget. It also would be fiscally irresponsible because it would make sound federal financial decisions more difficult, weaken congressional oversight, create a misleading federal budget, and violate the spirit of the BBA. Specifically:

1. *Sound public finance decisions would become more difficult*.—Moving aviation spending off budget would erase any remaining notion of fiscal discipline within Congress. Not only would it remove aviation spending from any measures of budget control, but it would have the further effect of creating opportunities to spend more in other programs. Placing aviation spending off budget without a corresponding decrease in the discretionary spending caps in effect would bust the caps enacted in 1997 by creating a "gap in the cap." This gap, amounting to $25.2 billion between 2001 and 2004, would likely be filled with increased spending from a variety of other programs seeking relief from the discipline imposed by the caps. If the caps were adjusted downward to reflect the off-budget move, then an even smaller share of the federal budget (now down to just 34 percent of all federal spending) would have to shoulder the burden of meeting the budgetary targets required by the BBA. Such vital, but unprotected programs as Coast Guard drug interdiction, national defense, the Centers for Disease Control, and many others could become subject to cuts, while federal spending on behalf of commercial airlines and recreational pilots would be increased and protected from congressional oversight.

2. *Congressional and presidential oversight of federal programs would be weakened*.—As the chairman of the Senate Budget Committee, Pete Domenici (R-NM), noted recently,

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[1] For a more detailed critique of AIR 21, see Ronald D. Utt, Ph.D., "FAA Reauthorization: Time to Chart a Course for Privatizing Airports," Heritage Foundation Backgrounder No. 1289, June 4, 1999.

"Off-budget gimmicks or "firewalls" reduce management and oversight of the FAA by taking trust fund spending out of the budget process. That's a bad idea—we should not place the FAA and the trust fund on permanent autopilot."[2]

Earlier this year, the General Accounting Office (GAO) testified before the House Transportation Subcommittee that

"When the [transportation] trust funds were created, Congress did not create them as automatic spending trust funds. It chose to retain annual oversight and control of spending from those funds in the appropriations committees."[3]

With aviation spending moved off budget, and escalating levels of funding set for the next five years, both Congress and the President would lose what little leverage they have to induce the notoriously troubled FAA to strive for higher standards of performance. Providing such protection to a government department that this year again earned the GAO's "high-risk" designation—a distinction it shares with the Internal Revenue Service and the Department of Housing and Urban Development—would be irresponsible.[4]

3. *Off-budget protection would diminish opportunity for reform*.—Once a program is moved off budget, and no longer is subject to annual budget review or periodic authorization, Congress has fewer scheduled opportunities to review it and, therefore, fewer opportunities to effect needed reforms. The federal government's involvement with commercial aviation has changed little since 1971, when the aviation trust fund was created as the primary funding vehicle for FAA programs. But since the 1971 FAA overhaul, there have been many changes in the world of commercial aviation; most of these changes—except for President Jimmy Carter's airline deregulation in 1978—have taken place abroad. These include the privatization of more than 60 airports in the past two years, the denationalization of many former government-owned airlines, and the privatization/corporatization of air traffic control systems, notably in Canada (1997) and in 16 other countries in recent years. By locking up funding for five years and placing such funding off budget, as H.R. 1000 would do, neither Congress nor the President would have much in the way of opportunity to impose reform, and the status quo would prevail until at least 2005.

4. *The federal budget would be even more misleading than it is today*.—Removing aviation funding from the budget would understate the size of the federal government. In fiscal year 1998, off-budget spending amounted to over $316 billion. More important, when other non-discretionary (labeled as "mandatory") spending is taken into account, over 66 percent, or $1.1 trillion, of the $1.7 trillion in federal outlays are essentially untouchable for Congress during the annual budget process. Programs not lucky enough to warrant designation as "off budget" or "mandatory," including national defense, education, and other discretionary line items, bear the brunt of any budget cuts needed to fulfill deficit/surplus targets, repay the national debt, or meet emerging priorities and emergencies.

5. *Supporters of other programs would seek similar protection*.—At present, only Social Security has received "off-budget" protection in recognition of the importance of the program for the well-being of many retirees and the firm, contractual relationship between the taxes paid in and the benefits received. No such significance or relationship applies to the FAA's spending programs, whose chief beneficiaries are the for-profit airlines, recreational pilots, and weekend hobbyists. All reflect a segment of society with the financial means to bear the risk of future budget restraint and the impact such uncertainty might have on the programs that assist them. Nonetheless, if aviation spending programs were placed off budget, other programs of potentially greater significance to the well-being of the country or to vulnerable constituencies, such as Medicare and national security, would be likely to demand the same protection—and could receive it. As a consequence, what remains "on budget" soon would amount to a minor share of federal spending, and much of the rest—now afforded off-budget status—would be beyond control, oversight, and reform by either the President or Congress.

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[2] Bureau of National Affairs, "House Passage of AIR–21 Stuns Senate; Domenici Mobilizes for Off-Budget Battle," Daily Report for Executives No. 116, June 17, 1999.

[3] U.S. House of Representatives, Committee on Appropriations, Department of Transportation and Related Agencies Appropriation Bill fiscal year 2000, Report No. 106–180, June 9, 1999, p. 33.

[4] U.S. General Accounting Office, High Risk Series: An Update, GAO/HR–99–1, January 1999; "The Department of Transportation's 10 Top Priority Management Issues," Statement of Kenneth M. Mead, Inspector General, U.S. Department of Transportation, before the Subcommittee on Transportation, Committee of Appropriations, U.S. Senate, 106th Cong., 1st Sess., February 25, 1999.

6. *The spirit of the Balanced Budget Act would be destroyed*.—The BBA was created to keep runaway spending in check, and to date has served as an important source of discipline in slowing the growth of discretionary spending. Although it has not always been honored, and many tricks and gimmicks have been suggested or utilized to sneak extra spending past its controls, the spirit of the BBA has survived and has been more effective than previous congressional budget reforms. AIR 21 could very well end this successful effort. Although not a new ploy, off-budget accounting for the Airport and Airway Trust Fund would exempt billions of dollars from budgetary restraints at the expense of other programs.[5] By taking the aviation trust fund off budget, Congress would risk setting a dangerous precedent. By undermining the sense of shared sacrifice that has helped many congressional committees to make tough decisions, advocates of other programs could become inclined to resist cuts and seek the same or similar privileges and protections.

CONCLUSION

Although the House voted overwhelmingly to pass AIR 21 (H.R. 1000) and to move aviation trust fund spending off budget, the bill's prospects in the Senate are uncertain, particularly when considering the Senate's record of firm opposition to the sort of budgetary gimmicks included in AIR 21. At present, the Senate's version of legislation to reauthorize the FAA (S. 82) proposes to spend substantially less than AIR 21, and also to leave the trust fund on budget and subject to existing spending limits and caps. As such, S. 82 offers Congress a fiscally responsible choice compared with the irresponsible excess of AIR 21.

[From the Heritage Foundation Executive Memorandum, Feb. 2, 2000]

SENATE SHOULD NOT TAKE FAA SPENDING OFF BUDGET

(By Ronald D. Utt)

In 1999, the U.S. House of Representatives passed H.R. 1000, the Aviation Investment Reform Act for the 21st Century (AIR 21), by a veto-proof majority and sent it to the Senate with the expectation that the upper chamber would support its unprecedented violation of fiscal integrity. Put forth originally by House Transportation and Infrastructure Committee Chairman Bud Shuster (R-PA), AIR 21 would place the Airport and Airway Trust Fund off budget and guarantee federal aviation programs minimum funding levels from general federal revenues over and above revenues derived from dedicated aviation taxes.

Strong Senate opposition to AIR 21—led by Senators Pete Domenici (R-NM), Frank Lautenberg (D-NJ), Richard Shelby (R-AL), and Ted Stevens (R-AK)—is based on concerns that the bill's proposals are fiscally irresponsible and would establish a precedent that other federal programs could use to avoid the discipline of the congressional budget process. The Senate has passed its own bill, the Air Transportation Improvement Act (S. 82), sponsored by Senator John McCain (R-AZ), which would authorize less spending than AIR 21 and make no change in the budgetary status of the Federal Aviation Administration (FAA). Achievement of a House-Senate compromise remains elusive, since the Senate refuses to accept AIR 21's budget-busting provisions, and authorization for FAA's Airport Improvement Programs has expired.

If AIR 21 were enacted and the aviation trust fund were placed off budget, federal aviation spending would be exempt from all congressional budget control mechanisms and afforded a level of protection now provided only to Social Security. Spending control mechanisms that no longer would apply include budget caps established by the Balanced Budget Act (BBA) of 1997, pay-as-you-go rules, annual congressional oversight and review, and other statutory budget limitations.

Advocates of AIR 21 argue that the off-budget privilege would prevent the diversion of tax revenues generated by the airline industry and its passengers to non-aviation spending, tax relief, or debt reduction. But if FAA spending were redefined as off budget, future aviation spending could be increased at rates above those permitted for such other unprotected programs as national defense, education, and law enforcement.

If AIR 21 were adopted by Congress and signed into law, its provisions would mark a major setback in Washington's long struggle to control spending, reduce taxes, and pay down the debt. Specifically:

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[5] The House Transportation Committee attempted to take the Highway Trust Fund off budget last year.

—Responsible public finance decisionmaking would be more difficult, because one program would be given more protection and privileges than the rest. Moving aviation spending off budget would undermine any remaining notion of fiscal discipline in Congress. Moreover, giving the FAA guaranteed minimum levels of funding out of general revenues would provide it with an added—and costly—privilege.

—Congressional and presidential oversight of federal programs would be weakened. As Senate Budget Committee Chairman Pete Domenici has observed, "Off-budget gimmicks or 'firewalls' reduce management and oversight of the FAA by taking trust fund spending out of the budget process. That's a bad idea—we should not place the FAA and the trust fund on permanent autopilot." Moving aviation spending off budget would deprive Congress and the President of what little leverage they have to induce the notoriously troubled FAA to achieve higher standards of performance. Diminishing oversight of a federal department that earned a "high risk" designation by the U.S. General Accounting Office would be irresponsible.

—Off-budget protection would diminish opportunities for reform. Once a program is moved off budget, it is no longer subject to annual budget review, appropriations, or periodic authorization. As a result, Congress would have fewer opportunities to review the FAA or encourage it to adopt fundamental reforms that today are sweeping commercial aviation, especially abroad. These include privatization of more than 60 airports in the past three years, outsourcing of various component activities, and privatization-corporatization of the air traffic control systems in Canada and more than a dozen other countries. By locking up the program for five years and placing its funding off budget, AIR 21 would ensure that the earliest reform opportunity could not occur until 2005.

—The federal budget would be even more misleading than it is today. Removing aviation funding from the budget would understate the size of the federal government by excluding a multibillion-dollar program. In fiscal year 1999, off-budget spending amounted to $321 billion; when other non-discretionary ("mandatory") spending is added to this amount, over 66 percent—or $1.2 trillion of the $1.7 trillion in federal outlays—is essentially untouchable in the annual budget process. Programs not lucky enough to warrant "off budget" or "mandatory" designations, including defense, public health, criminal justice, and education, bear the brunt of any budget restraint necessary to meet overall fiscal objectives.

—Supporters of other programs would seek similar protection. At present, only Social Security receives off-budget protection in recognition of its extreme political sensitivity and the essential benefits it provides to a large and vulnerable portion of the population. No such significance applies to the FAA's spending programs, the chief beneficiaries of which are for-profit airlines, recreational pilots, and weekend hobbyists. If programs that benefit commercial aviation are placed off budget, other federal programs of potentially greater significance to vulnerable constituencies or the nation's well-being would be likely to demand, and perhaps receive, the same protection.

Although the House voted overwhelmingly to pass AIR 21 and move aviation spending off budget, the bill's prospects are uncertain because of the Senate's record of firm opposition to the sort of budget gimmicks included in this bill. At present, the Senate-passed alternative (S. 82) proposes spending less than AIR 21, offers no minimum guarantees from general revenues, and would keep the trust fund on budget where it belongs. As such, it offers Washington a fiscally responsible alternative to AIR 21's fiscal excess.

Senator SHELBY. In short, the paper makes the points that: one, effective oversight would be reduced; reform of the agency would be more difficult; and, three, special budget treatment, as we all know, is a slippery slope. Special budget treatment is a code for reduced accountability and oversight. If the FAA were an agency that could be put on autopilot, then accountability and oversight might not be so important. But, unfortunately, the FAA is an agency with enormous challenges that require increased accountability and oversight, as pointed out in every study, review, or assessment of the agency in the last 20 years, most recently, in the 1997 Coopers & Lybrand independent financial assessment. Clearly, changing budget treatment is no substitute for responsible policy oversight.

I would note that a month ago we invited almost all the airline CEOs to be here this morning to share their views with us on these issues. Unfortunately, to my knowledge, none were able to join us today. I think they miss an opportunity to talk with two committees of the Senate directly involved in aviation spending issues. With all the meetings they have been having around the Hill on this issue, I would have thought they would have jumped at the opportunity to be here today. I will give some of those CEOs another opportunity to testify before my Subcommittee on Appropriations later this year about some of the issues my constituents have been giving me an earful about. Funny to me, my constituents don't seem to care about FAA's funding levels or delays as much as they do about the airlines living up to commonly expected levels of customer service and the implicit promise made by advertised air fare prices.

Mr. Chairman, I know I have taken too much time, and I really am more interested in what the witnesses have to say here. Thank you for your indulgence.

Senator DOMENICI. Senators, do I understand that it is acceptable to everyone that we proceed? I think we ought to hear from the witnesses.

Thank you very much for taking over, Senator Gorton, Senator Lautenberg, in my absence.

Let me just say in addition to the statement which was read on my behalf, this is part of our oversight responsibility, ongoing oversight that we will do for the next couple of weeks in various parts of our government, and it was thought to be rather important to get a better understanding of the needs in this area because we have not yet resolved the multi-year bill for FAA that is in conference. But, in addition, believe it or not, we have not resolved how much appropriations money there will be available for the entirety of government. We are still negotiating and we still have to have meetings on that. And it is relevant how much, in addition to any guarantee of trust funds which is given in our conference, how much additional money might be needed because we don't have a very large pot of non-discretionary money to spend on all of government.

So I hope everybody understands. We don't hold this to become technical experts on the subject matter but, rather, the broader picture that has been presented in my opening remarks and by the distinguished chairman and ranking member.

Now, the Honorable Jane Garvey, Administrator of the Federal Aviation Administration, whomever you have accompanying you, they are welcome to speak if you want them to. Their presence is noted, and their names. Let me say it has been a pleasure to know you for a number of years. I think you have taken a challenge here that is very difficult, and to my knowledge, thus far, what I know about it, I commend you for very, very serious efforts to fix some things that need fixing. Would you proceed, please?

STATEMENT OF JANE F. GARVEY

Ms. GARVEY. Thank you very much, Mr. Chairman. It is a pleasure to be here and to be with members of the committee.

If I could begin by first of all expressing our sympathy to the families who experienced really an irreplaceable loss this week with Alaska Airline Flight 261, and we are very much aware of the ties of Senator Gorton and Chairman Stevens, too, as well, to those communities.

We do have an extraordinary aviation system in this country. We serve 600 million passengers a year. But as Secretary Slater commented yesterday, in somber moments like these, I think it really underscores the importance of the work that we do. And I would only add that it also serves to encourage us to redouble our commitments to doing absolutely the best job that we possibly can. And I know I am speaking particularly for the men and women who have joined the NTSB in investigating this accident in great detail.

Mr. Chairman, again, thank you very much for having us here today. And if I could—and I will do this as briefly as I possibly can, but I would like to try to answer, if I could, two fundamental questions this morning. The first is: How are we managing, how are we at the FAA managing this enormous challenge of modernizing the Air Traffic Control System? And I think inherent in that is the question: Are we up to the task?

Second, I would like to touch on what we see as some of our major challenges. First of all, the management approach we are taking I think can be summed up in one phrase that I am sure many of you have heard by now, and that is, evolution not revolution.

Historically, I think the FAA—and, in fact, government in general—takes on projects that are often too massive, too ambitious, large, complex projects that never seem to get done. So instead of the big bang approach, we are moving incrementally, step by step, reducing the potential for cost overruns and delays. And we have done this by listening to the users of the systems, the airlines who have to use the system, and by establishing unprecedented agreements, both with industry and with our labor unions. I wanted to underscore that because really it is something we will accomplish only if we are working together on this issue.

We think the approach is paying off, and it is paying off in three important elements of modernization, again, very briefly. First of all, sustaining the system. There are thousands of pieces of equipment in the system, and we often focus on the very sort of visible projects. But in 1999, for example, we replaced over 750 major pieces of equipment in the system. We replaced 30-year-old equipment in all of our centers, and that is the equipment that is used to manage the Air Traffic Control System. HOST was completed and replaced in December. DSR will be replaced in all of the centers by May 2000. We are very happy to say that last week we initiated STARS in Syracuse, and El Paso went online 2 or 3 weeks ago.

So those, again, provide the platforms for the future capability. So in terms of sustaining the system, we are doing a great deal to replenish the system that is out there. And we have done all of this while managing the once-in-a-century problem, Y2K.

The second element of modernization is the whole issue of safety enhancements, and that really speaks directly to our mission of aviation safety. I think some of the members touched on that, the

whole issue of weather, and included in our modernization effort is a whole series of weather initiatives that gives us much more accuracy in producing the weather information. Our goal here is to really have in place in all of our facilities common weather information, the most state-of-the-art information. So both in terms of sustaining the system and safety enhancements, we are doing it incrementally, and we are doing it in a block-by-block fashion.

The third element for modernization is improving the whole system efficiency. Free Flight Phase One really is the cornerstone, and I think some of you have heard me speak about this before. Again, it could be a very ambitious massive project, and what we have said is let's identify a series of automation tools which give us increased efficiency and increased capability. This has been accomplished. It has been accomplished with an unprecedented agreement with industry and an unprecedented agreement with our own unions. I am delighted to see Bob Baker here, who has been helping us in the whole effort with Free Flight.

We have a very simple, straightforward contract with industry. It is, we deploy the technology; and industry helps us measure the results. So block by block, step by step, incrementally, we are getting modernization done. I think in particular, look at some of the investments that Congress—or some of the money that Congress has given us in the past 2 years: HOST, $164 million, and we got it done ahead of schedule. I am delighted with that.

Free Flight is on schedule. We will have those technologies deployed to selected sites by the end of 2002, and we are moving very aggressively in that area. So the incremental approach is important.

Second, I think there are other ways that we are managing differently. Historically, the FAA has taken a stovepipe approach to solving problems. We tend to be rather layered and hierarchical. The decisionmaking is often diffused in the agency. What we are doing now is taking every major initiative, organizing it with one point of accountability, and organizing it across the lines of business. Y2K I think gives us a great model. Free Flight Phase One gives us another model where we are pulling these programs together under one point of accountability.

I think another issue that has been very important to us and something we have learned well in the last couple of years, and that is the importance of human factors. Technology is only one part of the challenge. Human factors is another part. Getting our controllers and the users involved early on in the deployment of these technologies is really key. If you look at the Free Flight office or you look at the efforts in STARS right now, you will see the controllers working side-by-side with the managers. I think that is critical as well.

Senator Lautenberg spoke of two very, important tools that we received from Congress. We are absolutely indebted forever for both personnel reform and acquisition reform.

Personnel reform has already allowed us to streamline the recruiting of top people. We have been able to actually recruit some people into the agency from industry. I think we would not have been able to do that 5 or 10 years ago. We are on the right track with personnel reform. We had a terrific pilot program last year

that really taught us a great deal, and we are getting ready to move out on implementing the performance based compensation plan for the entire agency in the spring of this year.

Acquisition reform, 50 percent reduction in time, great value-added. We are seeing, again, I think some real improvements. Now, let me just say that there is more we can do. We should be doing more and we are doing more. We have had independent reviews from the IG, from Booz Allen, from NAPA. All of them have given us some very specific suggestions which we are taking and implementing.

Finally, the issue of cost accounting. In some ways, I think that holds the greatest promise for us in the future. We are well on our way with cost accounting. I will tell you we have had to slow down a bit because of some of the budget constraints, but, again, in the area of air traffic control, we are well on our way to seeing cost accounting in place.

Let me just finally mention some of the challenges that we have ahead. I think when we look at the large technology, we are always going to have issues in managing those large, complex projects. I think we need to constantly ask ourselves: Have we set the right deadlines? Do we have the right milestones? Are we asking the right questions? But we are prepared to do that, and I think we are, again, well on the way incrementally to getting those projects done.

I think another great challenge for us is the whole issue of delays, and you spoke about that in your testimony, a number of you. We are very focused with industry on a Spring-Summer Plan that is really going to change the way we approach some of the issues of managing the Air Traffic Control, and that in the short term is going to give us some very positive benefits. Again, that is something we are just about ready to announce, we hope by the end of February.

We will continue to have challenges in personnel reform, in acquisition reform, in cost accounting. But the greatest challenge is going to be to keep focused on those elements, do the best job we can at implementing, and then using those tools as flexibly as we possibly can.

One last word, though, if I could, on reauthorization. From our perspective, we see this as one of the great short-term challenges. I do want to underscore what Secretary Slater said to you, Mr. Chairman, just the other day when he thanked you and this committee for your efforts on completing the action on the Reauthorization Bill. We are very much aware of some of the very difficult issues associated with that bill, particularly in the area of funding. We do appreciate your willingness to tackle those very tough questions with us.

The other day I spoke with Don McCarty, the head of American Airlines, and he made a statement that has really stayed with me. He said that it would be so good to get that behind us so that we can continue to focus like a laser on some of the issues that really are so challenging to us. I think the issue of further reforms is part of that, and we look forward to, not only hearing from some of the other witnesses today about some of their experiences, but also, we

look forward to working with this committee in the future on additional reforms that we could possibly put in place.

PREPARED STATEMENT

We do believe that passing the Reauthorization Bill is one step in taking the debate and the dialogue to another level, and we absolutely look forward to working with members of this committee to seeing it through.

Thank you very much.

Senator DOMENICI. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF JANE F. GARVEY

Chairmen Domenici, Shelby, and members of the committee and subcommittee: Thank you for the opportunity to appear before you this morning to discuss the Federal Aviation Administration's progress in modernizing the National Airspace System (NAS). I am pleased to report that in the past 2 years, the FAA's restructured approach for modernization has produced promising results—specifically in the creation of a manageable short and long-term strategy to modernization and in the form of positive responses from our partners in the aviation community.

The FAA is a 24 hour/7 days a week service delivery organization. The FAA controls approximately 200,000 takeoffs and landings per day and moves over 600 million passengers per year. This latter number is expected to reach 1 billion within a decade. Our customers depend on the safe and efficient operation of the NAS. Maintaining this system in a safe and efficient manner, while providing for the anticipated growth in the use of NAS, is the FAA's top priority.

Our Nation's decade-long economic expansion has produced a sustained increase in demand for air traffic control (ATC) services. Traffic has grown about 4 percent a year and some locations have seen 20 percent increases during a year as new flights are added into highly competitive airline links. As this economic growth and increase in demand for our services continues, increasing pressures will be placed on aviation resources.

The world looks to the FAA for guidance and support not only for air traffic control, but for all aviation activities, including security and certification. The standards we set will guide international aviation for years to come.

MANAGING DIFFERENTLY

Our management approach can be summed up in a phrase that I am sure many of you have heard by now: evolution, not revolution. Instead of taking a "big bang" approach to modernization, we are moving incrementally, building upon each step that we have taken, reducing the potential for cost overruns and schedule delays. In addition, the FAA has established a strong partnership with the aviation industry and labor unions. As a result, the FAA has focused resources on areas important to industry and has taken steps to coordinate with the appropriate labor groups.

This management approach to NAS modernization is the right one to take, given the tight budget constraints in which all Federal agencies must operate. As a Federal entity, the FAA must also meet its annual performance goals. Our annual performance is also tied to how effectively the FAA manages the resources Congress provides. Our NAS modernization efforts, built upon incremental steps, is best suited for the task of managing the dollars your committees provide to the FAA.

As I mentioned, the FAA has structured our approach to modernization with a particular emphasis on air traffic control modernization, the cornerstone of the NAS. We have defined three elements to air traffic control modernization: first, sustaining our current system and renewing the infrastructure; second, adding safety feature, (safety, of course, being the FAA's primary mission); and third, improving the system to increase capacity and efficiency.

OUR ACHIEVEMENTS

When it comes to NAS sustainment, I'm sure each member of both committees is well aware of our largest and most recent sustainment project—Y2K compliance. The FAA had to assess and certify 628 different systems and programs—a daunting task to say the least. Whether you were traveling at 35,000 feet as Senator Gorton and I were at year-end, or following worldwide festivities on television, you never

heard anything alarming or threatening about our transition. It was the dedication, time, sufficient funding, and effort of hundreds of FAA employees that made our Y2K transition such a success.

In order to sustain our current systems and renew our aviation infrastructure, we have incorporated both major and minor changes to the air traffic control system. Thus far, we have installed and integrated more than 750 major systems and pieces of equipment into the NAS. These efforts to sustain our system produce immediate paybacks. For instance, last year the FAA replaced the HOST and oceanic computer system equipment used to control air traffic at the 20 en route and 3 oceanic centers. We are also replacing the associated radar display systems at the 20 en route centers, with 12 systems fully operational last year.

Many of our NAS sustainment projects are nearly complete, while others are beginning to bear fruit. For example, this coming May we will dedicate the last of the Display System Replacements (DSR), replacing 30-year old display equipment in the en route centers, and completely modernizing controller workstations. DSR provides controllers with new hardware and software display systems, and provides a platform for future enhancements. We are in the process of replacing one system per month, center by center, at all 20 centers.

In December, I had the pleasure of traveling to El Paso, Texas, to see the first use of our new air traffic control automation system in the terminal environment with STARS, the Standard Terminal Automation Replacement System. STARS is the equivalent of DSR in the terminal environment, the most intricate environment in the NAS. Although the FAA has faced a number of difficulties with the development of STARS, controllers, technicians, and management are working side by side to resolve open issues and problems. With the first version of STARS now running in both El Paso and in Syracuse, New York, our efforts are beginning to pay off in this critical area.

One of the best examples of how the FAA is managing differently is the work of the Human Factors Working Group, a group that grew out of our development efforts in STARS. The working group, comprised of representatives from the FAA, our labor union leadership, and industry, developed a process to identify, monitor, and resolve human factors issues throughout the entire acquisition process so that these issues do not arise unexpectedly and too late in a program. Since air traffic controllers play such a crucial role in the FAA's safety mission, the Human Factors Working Group makes sure that they have an early and continuing voice in the acquisition of systems that affect the job that they are so committed to doing.

We are also currently testing the Wide Area Augmentation System (WAAS). WAAS works with the satellite-based Global Position System (GPS). The GPS signal that is available for civil use is accurate but requires augmentation for aviation use. The GPS signal by itself does not fully satisfy civil aviation navigation requirements. WAAS would correct the signal to provide the safety, integrity, and accuracy to satisfy civil aviation navigation requirements.

The FAA and Raytheon's latest testing of WAAS indicates that the accuracy of the system exceeds our requirements. However the performance to date of the safety monitor function that provides system integrity has not yet met requirements. WAAS integrity is an essential element in the program. In order to ensure the system meets essential safety requirements, the FAA is currently assessing how much work will be required.

Our second element of NAS modernization, adding safety features, is an effort that speaks directly to the FAA's primary mission of ensuring aviation safety. Our additional safety features include advanced weather information systems. These enhancements will provide us with more precise, more accurate, and timelier weather information. In our modernization blueprint, we have included many weather initiatives, such as the Integrated Terminal Weather System and the Weather and Radar Processor. These provide increased accuracy in terminal area and en route weather information, as well as Terminal Doppler Weather Radar for major airports where windshear and microbursts are safety issues.

WHAT WE ARE FOCUSED ON

The third element of modernization, improving the capacity and efficiency of the system, means fewer delays, lower costs, and better service. The crux of this third element is Free Flight Phase One. Free Flight Phase One is the first step to an innovative approach to air traffic control, moving from "control" to air traffic "management." Free Flight Phase One is designed to move the NAS from a centralized command-and-control system between pilots and air traffic controllers to a distributed system that allows pilots, wherever practical, to choose their own route and file a flight plan that follows the most efficient and economical route. The overall benefit

of these programs is to enable our air traffic control system to accommodate the future increase in flights and provide more optimum routings for aircraft in the Nation's airspace.

Free Flight Phase One represents an historic point in the FAA's history. Under this program, we have reached a consensus with industry that is virtually unprecedented: an agreement from all sectors of the aviation community. Our agreement with the industry is simple: we deploy the systems and the remainder of the community measures the results and tells us how they are working. After receiving this feedback, we will decide upon our next steps. Maintaining this consensus is an enormous challenge for the FAA, particularly in an industry where competition is the guiding principle.

Moreover, Free Flight Phase One is a perfect example of the benefits of the FAA's "evolution, not revolution" approach to NAS modernization. Under this building block approach, we not only reduce the risks of cost overruns and schedule delays; we take into account the changing nature of emerging technology. The FAA's NAS modernization plan is a forward-looking approach that is scheduled to take place over the next 15 years. With our new incremental, evolutionary approach, we will be able to accommodate changes in technology and incorporate them into the NAS in a managed fashion.

AIR TRAFFIC CONTROL REFORM

Finally, I would like to discuss air traffic control reform. At this crucial time, when Congress is in conference on important FAA reauthorization legislation, I would like to emphasize the Administration's commitment to meaningful and necessary air traffic control reform, a much needed long term solution. Fundamental reform of air traffic control has been an Administration priority for 6 years. The goal is to make our air traffic control system as efficient as it is safe, a goal we share with this committee. Through the expanded capacity that greater efficiency would provide, we can reduce delays, better serve under-served communities, and accommodate the enormous growth projected for this vibrant industry.

Although the Administration has proposed different organizational structures at different times, our three principles for ATC reform—business-like management, cost-based pricing, and budget reform—have remained the same. They have been endorsed by three blue-ribbon commissions; most recently the 1997 congressionally mandated National Civil Aviation Review Commission (NCARC). Both the House and the Senate recognize the importance of reform to the future of air traffic control, and both have some elements of reform in FAA reauthorization legislation that is now in conference. The Administration wants to be part of the dialogue on the important issue of reform. We believe our three principles provide the basis for sound, responsible, achievable reform.

First, the FAA needs to be able to operate the air traffic control system more like a business. The Administration is fully supportive of the NCARC recommendation that FAA management must become performance based. Congress has already given us key elements of management reform in the form of streamlined personnel and procurement authority. A key reform still needed is the establishment of a chief operating officer (COO) whose salary and tenure are linked to concrete performance measures. We recognize and appreciate that both the House and Senate bills would create a COO.

Second, the FAA's ATC revenue stream must become cost-based. The Administration believes that Congress should replace the current financing mechanism, an excise tax on airline passengers, with a system in which the actual commercial users of air traffic control services pay for them based on the cost of those services. (Like NCARC, the Administration agrees that general aviation should continue to pay a fuel tax.) As stated in the NCARC report, "A cost-based system of charges will change the way the government, as the provider of ATC services, and the aviation industry, as the user of ATC services, develop their respective policy and management decisions. Using such a system, in and of itself, will bring about a very significant management improvement." In other words, cost-based pricing is necessary to drive management reform.

Third, in exchange for pricing reform, Congress should ensure that the resulting cost-based revenue from air traffic control users is spent *exclusively* on air traffic control. Such a guarantee will make it easier for the FAA and its customers to meet operational and capital spending needs for ATC.

Air travel is a critical engine of economic growth, whether it is the leisure travelers who fuel tourism or the many business travelers who depend on reliable, convenient air service. If we do not reform ATC to enable it to accommodate the antici-

pated growth of air travel, we will be making a fundamental decision to limit our Nation's economic growth during the 21st century.

SUMMARY

As for our next steps in modernization, we are currently exploring several possibilities. Here, we strive to strike the right balance between looking towards the future and not biting off more than we can—or should—chew. As we modernize the NAS, we continue to anticipate future needs, assessing how viable various options are.

FAA's future actions must be to look at improving our management tools. Our initiatives in cost accounting, personnel and acquisition reform, and our strong partnership with industry will enable us to effectively manage our current resources and future demands placed on the NAS.

The challenge facing the FAA is to finance the capital investments that will allow the agency to make key safety improvements, keep up with growing air travel demand, and improve efficiency of aircraft operations. This requires a level of funding that will allow new initiatives as well as provide stable funding for existing projects. The FAA currently makes choices among several valuable projects, all of which can provide significant benefits to aviation.

Making choices is not unique to the FAA, but the aviation industry senses that valuable new initiatives are vital to improving aviation efficiency. We are working to address these in the fiscal year 2001 budget, while sustaining the levels of capital investment sufficient to make solid progress towards modernizing the NAS.

Modernization and maintenance of the NAS is a significant challenge for the FAA. Congress has supported the FAA in its efforts toward modernization and reform, and I look forward to continuing that working relationship with you, Mr. Chairmen, and the members of both committees.

Thank you for the opportunity to appear before you this morning. That concludes my prepared remarks and I would be pleased to answer any questions you may have.

Senator DOMENICI. Senators I received a note from Senator Grassley that he is on a very short time frame. He would like to make a brief opening statement.

OPENING STATEMENT OF SENATOR CHARLES E. GRASSLEY

Senator GRASSLEY. Yes; It will be very brief. The reason I am doing it, for the benefit of my colleagues, is because I have a constituent before the Finance Committee at 11 o'clock. This statement is in regard to the funding for the FAA.

I sent you a letter, Mr. Chairman, that asked that minimum funding be made available to meet the President's fiscal year 2001 FAA budget request. Maximum funding for the amount fully authorized by law would be the ideal that I support.

I should further explain that I do not include in my request any of the reported fees that the President may be asking for in his budget request. To the extent necessary, FAA funding should come from the general fund.

All of this should be done through the regular budget and appropriations process. There should not be a firewall or other mechanisms to segregate these funds. I believe that this request is within the position which you, Mr. Chairman, have so clearly stated many times of late, and I hope it will be possible for you to accommodate the request.

My letter states satisfactory resolution of air transportation problems will take more than increased Federal funding. I agree with what Senator Shelby has said in his statement today. I believe that these efforts will take more than a massive infusion of public funds. It will take structural and cultural changes within the agency. I will note that the FAA has received increased Federal funds

in the past, and there is some question as to how wisely those funds have been spent.

I thank all my colleagues for accommodating me.

Senator DOMENICI. I wanted to thank you for your comments and thank you for the support for the position we have taken in conference, which is precisely what you have said. And you are aware of what has been offered, and you are aware of what hangs us up. And I don't know when it will be completed, but we surely want to finish it. And you are urging us to finish it, but obviously you are urging us to finish it on the grounds that you consider sensible. And I thank you for them, and they will be used by me. When people ask about what other Senators think, I will be able to quote someone that knows precisely the problem, as you have stated.

Senator GRASSLEY. Thank you, Mr. Chairman.

Senator DOMENICI. Let's now move to the Inspector General, the Honorable Ken Mead, Department of Transportation.

STATEMENT OF KENNETH M. MEAD

Mr. MEAD. Thank you, Mr. Chairman. I want to express our appreciation for your having this hearing today. I think the hearing is a statement not just about the need for adequate investment, which we all want in our aviation system. This hearing is also about accountability and oversight for money the FAA already receives, as well as any plus-ups that may come along.

I think it is important to outline the context here. FAA oversees the largest, busiest, safest air transportation system in the world. Until Monday night, we had a remarkable safety record going for 2 years. I think that was a real credit to FAA and the airlines as well.

I would like to focus, though, on three issues: restructuring the FAA, progress with acquisition and personnel reforms, and a word or two about FAA financing. All of these issues were mentioned in the committee's invite letter.

On restructuring, there are a number of proposals being discussed that suggest FAA ought to operate more like a business. Some of these proposals suggest a corporation and some suggest privatization. There is a variety.

I want to make clear that I don't envision any circumstances where DOT's role in safety oversight ought to be transferred outside of the Federal government. I think it ought to be taken off the table. Further any proposal to restructure FAA or have air traffic control spun off and run by a commercial type of organization ought to be carefully examined.

I think the experiences of other countries that have done this are instructive, such as NAV Canada. But it is difficult to use them as a conclusive frame of reference because our air traffic control system is so much larger, more diverse, and more complex. Just a number as a point of reference here. The United States handled nearly 44 million aircraft in the en route environment in 1998, and that is compared to about 5 million for Canada. This doesn't mean that we should avoid inquiry into new ways of doing business and how to be more efficient and effective.

Now, if the Congress should choose to make major changes to FAA's structure or commercialize air traffic control services, I urge

great caution. We already have a safe system, despite all the bumps, warts, needs for improvement, and so forth. And I don't think there is any substitute for firsthand experience in a limited air traffic control environment.

Before you consider expansive changes or wholesale changes to our entire system, the oceanic air traffic control environment might provide an area that could be explored in that regard. While exploring oceanic air traffic control would be very cautious and conservative approach, it would give us all a much surer footing on which to proceed in the future.

Why oceanic? There are a number of reasons. Oceanic services are operationally distinct from domestic air traffic control. The oceanic environment is a growth market in need of modernization. The United States is behind, and changes in this area would affect only 300 of FAA's 15,000 controllers. Also it would have very limited impact on most airports, small carriers, general aviation, and air taxis. I am not making a recommendation here, but just putting on the table an issue that the Congress may wish to explore.

I would like to make some comments on acquisition and personnel reform. It was in late 1995 that Congress provided the FAA with the tools to operate in a more businesslike manner. Essentially, Congress exempted FAA from the procurement and personnel rules. There has been some progress—I don't want to deny that at all—but there has been limited impact on bottom-line results.

To its credit, FAA has adopted a "build a little, test a little" approach to some acquisitions and has made progress in reducing the time to award contracts and the time to amend contracts. And some systems have been deployed on time. At the same time, however, problems persist with technologically challenging systems like STARS, which would replace computers in the terminal environment, a system called WAAS, which pertains to satellite navigation, and AMASS, which would help prevent runway incursions, which is a very important area of safety risk. These systems have a cumulative value of over $4 billion, and they are experiencing severe cost and schedule problems.

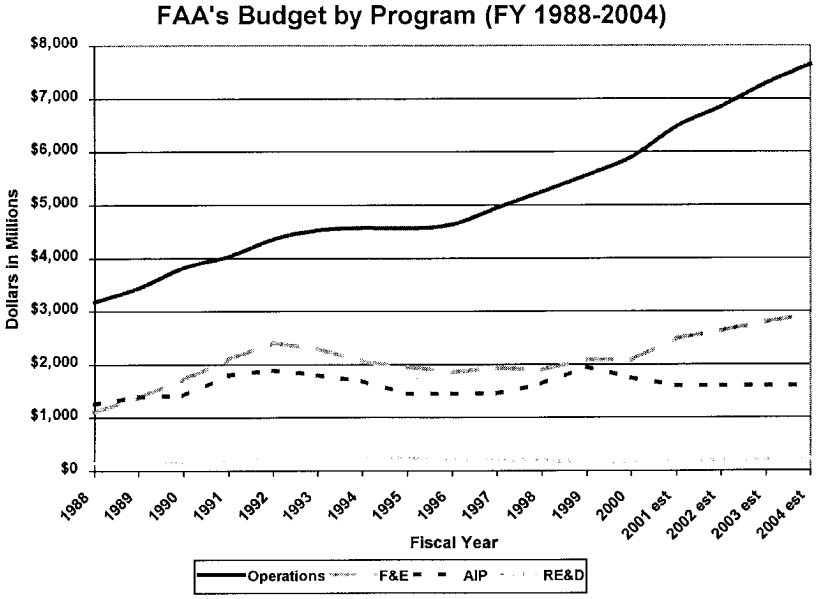
The problems with these acquisitions, Mr. Chairman, are unambiguously not related to a lack of funding or the result of burdensome procurement or personnel rules. The common thread of the problems with these acquisitions are problems in developing software-intensive computer systems and addressing human-computer interface issues.

In the case of STARS that I mentioned, the human factor issues were identified much too late in the process. So, regardless of the amount of money that FAA gets, the agency needs to do more to protect the government's investment, make contractors more accountable, and address human factor issues earlier in the development process. It is very costly to address human factors at the 11th hour and doing so can lead to major design changes. I believe the Administration is moving to address this problem.

Personnel reform. FAA has had some success with personnel reform, but by far the most visible result of personnel reform has been the new compensation agreement with the controllers. This agreement has markedly improved relationships between FAA

management and the union, the controllers. But it comes at a price. The new agreement will require nearly $1 billion in additional funding over the life of the agreement, and it has led to sharp increases in the agency's operations costs.

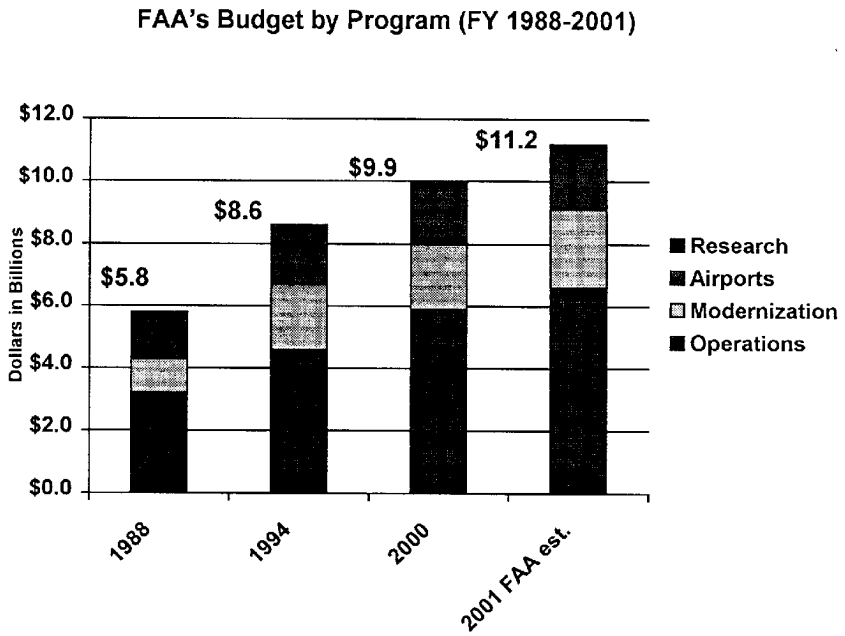
What I want to illustrate with this chart—and it is also in the testimony—is that for fiscal years 1998 through 2004 there has been sharp increases in the agency's cost of operations, which are principally salaries. Operations is the blue line. As you can see, the cost of operations constrains the dollars available for modernization, which is the yellow line, and dollars for airports, which is the green line.



It is a fact, Mr. Chairman, that the United States invested more in fiscal year 1992 in modernization than it will in fiscal year 2000. But it is also true that at the same time operations costs increased about 40 percent, from $4 billion to $6 billion.

Finally, on financing FAA, I know there are various proposals, but they all have one common thread: to increase the amount of funds available to the agency.

This other chart shows the FAA budget by program for fiscal years 1988, 1994, 2000 and 2001. While FAA's overall budget has grown, funding for airports and capital improvements have remained relatively steady. Because operations costs have increased, FAA faces significant risk in meeting its operation costs without crowding out capital investments.



I also want to point out that on the trust fund issue, the actual receipts received by that trust fund from taxes aren't enough to finance all of FAA. It is about $700 million short. That doesn't include the interest earned.

I would like to close with a word about FAA's cost accounting system. The cost accounting system was first required of FAA in 1996. It had been talked about for many years before. A cost accounting system would help the agency keep track of its costs. Most businesses would go into bankruptcy if they didn't have one. FAA recently deferred its implementation date for a cost accounting system to 2002. I think that decision ought to be reversed, and it ought to be done sooner rather than later. If you can't track where your money is going, like in your checkbook, how much money you are getting, and what you are spending it for, it is very difficult to make a persuasive case as to where you place additional investment and what you are going to get out of that investment.

PREPARED STATEMENT

So I would urge the FAA and the Department to get on with that cost accounting system, and I think that would put them in a better position to frame the case for additional investment.

That concludes my statement.

[The statement follows:]

PREPARED STATEMENT OF KENNETH M. MEAD

MODERNIZING THE FEDERAL AVIATION ADMINISTRATION: CHALLENGES AND SOLUTIONS

Mr. Chairmen and members of the full committee and subcommittee: We appreciate the opportunity to discuss "Modernizing the Federal Aviation Administration: Challenges and Solutions."

FAA oversees the largest, busiest and safest air transportation system in the world. FAA also is responsible for operating air traffic control, which is the nerve center of the Nation's air transportation system. Until Monday night, the safety record for the last 2 years was remarkable. This is a credit to FAA and all segments of the aviation community. At the same time, FAA and the aviation community are facing a number of challenges. The demand for air travel has doubled since 1980 and is expected to continue to grow through 2015. Unfortunately, with the growth in demand has come growth in delays, and consumer dissatisfaction with airline service is high. In the last 5 years, delays have increased by over 50 percent.

Against this backdrop, FAA's air traffic control modernization efforts and airport capacity have not kept pace with the demand for air travel. These are legitimate concerns and they are not new. Congressional hearings dating back to the mid-1980's focused on the same subjects. As there were then, there are now proposals to restructure FAA's air traffic functions to perform more like a commercial business and to provide additional funding for air traffic control modernization and airport improvement programs.

Today, I would like to make three points.

First, there is no air traffic system in the world as large and complex as that of the United States. It is safe, but actions are needed to make it more efficient. Any proposal to restructure FAA or have air traffic control run by a commercial type organization must be carefully examined. Furthermore, the oversight of aviation safety should not be transferred outside the Department of Transportation. This is an inherently governmental function for which the traveling public deserves the highest level of independent scrutiny and assurances.

If the Congress should choose to make any major changes to FAA's structure or commercialize air traffic control services, we would urge great caution. Having first-hand experience in a limited air traffic control environment is essential before any expansive changes are considered. FAA's oceanic air traffic control could provide this experience. Oceanic services are operationally distinct from domestic services and there would be limited impact on small carriers, general aviation, and air taxis. It is an area where the United States could solicit lessons learned from other countries that have already taken steps to commercialize air traffic control operations.

Second, Congress has already provided FAA with the tools necessary to modernize the National Airspace System and obtain the necessary skills to operate effectively.

In 1995, Congress exempted FAA from Federal procurement and personnel rules. After 4 years, there has been some progress, but overall, these reforms have had limited impact on bottom line results.

To its credit, FAA has adopted a "build a little, test a little" approach to its acquisitions and has made progress in reducing the time to award contracts under acquisition reform. In addition, FAA has deployed systems such as the Display System Replacement (new color displays for en route controllers) on time and within budget. However, cost and schedule problems persist with key modernization projects, such as efforts to install new computer systems in the terminal environment and move toward satellite-based navigation.

FAA has also had some success with personnel reform in that managers have been able to hire qualified candidates faster than under the Federal Personnel System. By far, however, the most visible result of personnel reform to date has been the new compensation agreement with its controllers, which has improved management-labor relations. However, this agreement also has led to sharp increases in the agency's operations costs, principally salaries, which now constrain funding for air traffic control modernization and airport development. It is a fact that the United States invested more in fiscal year 1992 in modernization than it will in fiscal year 2000. But at the same time, operations costs increased almost 40 percent from $4.4 billion to an estimated $6.0 billion.

Exemptions from Federal rules may facilitate success, but management accountability, strong contractor oversight, effective cost controls, and a sound cost accounting system are the essential ingredients to modernize and effectively manage the air traffic control system.

Finally, several proposals have surfaced over the past year to finance FAA, all of which had one common thread—to increase the amount of funds available for FAA operations and air traffic control modernization efforts. Based on FAA's estimates, by 2004 its total budget requirements will be over $12 billion or 20 percent greater than in fiscal year 2000. FAA faces significant risks in meeting its operations costs (primarily salaries) without crowding out capital investments. The means for financing these requirements is a major issue that the Department, Congress, and aviation users continue to debate.

There are investment opportunities that will significantly decrease airline costs, provide better and safer service to the flying public, and reduce FAA's operating

costs. These include data link communications, collaborative decision-making systems, and efforts to reduce runway incursions, a major area of safety risk, but additional funding alone will not get the desired results. For example, FAA must control its operating costs, do a better job of negotiating contracts for large software-intensive efforts that include appropriate measures to withhold payments if progress is not satisfactory, and implement a sound cost accounting system.

FAA originally planned for its cost accounting system to be fully implemented by October 1, 1998, but has yet to implement the system. FAA recently delayed the completion schedule until some time in fiscal year 2002 because of Operations funding constraints. This decision should be reversed. FAA needs a reliable cost accounting system sooner, not later. Any business that fails to track and control its costs would most likely go into bankruptcy.

In addition to implementing a cost accounting system, FAA needs to develop a strategic business plan—a key tool for any successful business. The plan should provide key corporate strategies and operating plans over the next several years, and describe the timing and impact of those strategies. The plan should outline agency strategies for investing in future technologies, as well as how the agency will control the rising costs of operations and bring about productivity enhancements.

RESTRUCTURING FAA

There are a number of proposals under discussion regarding restructuring FAA to operate and perform more like a business. However, we want to make clear that there are no circumstances we can envision in which the Department of Transportation's role in oversight of aviation safety should be transferred outside the Federal Government. Safety oversight is an inherently governmental function for which the citizens of the country expect and deserve the highest level of independent scrutiny and assurances. But this does not mean we should not try to find ways to deliver air traffic control services and implement new technologies more efficiently and effectively. However, in light of the size, complexity, and safety record of FAA, any proposal to restructure or have air traffic control run by a commercial type organization must be very carefully examined.

There are primarily three concerns with proposals that would spin off air traffic control (ATC), air traffic controllers, and ATC infrastructure development and investment to a commercial enterprise, while simultaneously retaining safety oversight within FAA. These concerns include: (1) how a commercial enterprise would balance safety against costs and ensure that decisions come down on the side of safety; (2) whether a commercial enterprise would have the incentive to initiate research and development in cutting-edge technologies; and (3) whether a commercial operation could adequately protect and respond to the needs of all stakeholders, including passengers, in our diverse aviation system. FAA's stakeholders include over 194,000 general aviation aircraft, more than 5,000 public use airports, and over 12,000 small carriers and air taxis.

Numerous other countries, including Canada, Germany, Australia, and New Zealand, have assigned their ATC System, once provided by government to entities having administrative and often financial autonomy. Canada transferred its civil air navigation services to NAV Canada in November 1996, and some have cited it as a role model for FAA to follow. We greatly appreciate the information NAV Canada has shared with us on their experiences in commercializing air traffic services. The experiences of NAV Canada and other countries are instructive, but it is difficult to use their experiences as a conclusive point of reference because our air traffic control system is so much larger, diverse, and complex. Several differences are shown on the following chart.

Comparison of Attributes for FAA Air Traffic Services and NAV CANADA

Attributes	FAA Air Traffic Services	NAV CANADA	Percent of NAV CANADA to FAA Air Traffic Services
1998 Traffic Activity (En route)[1]	43,700,000	3,600,000	8%
1998 Traffic Activity (Towers)[2]	53,800,000	5,300,000	10%
Domestic Customers[3]	6,651	1,300	20%
Air Traffic Facilities[4]	575	190	33%
Public Airports	5,324	1,254	24%
General Aviation Aircraft	194,800	15,000	8%
Staffing	36,400	5,200	14%
FY 1999 Funding[5]	$6.4 billion	$568 million	9%

Notes:

1. En route traffic activity includes all aircraft handled by Center controllers.
2. Tower traffic activity includes take-offs and landings.
3. Domestic Customers include commercial air carriers, commuters, air taxis, and flight schools.
4. Air traffic facilities include Centers, Towers, Contract Towers, Flight Service Stations, and Approach Control Facilities.
5. Figures in U.S. Dollars. Fiscal Year 1999 figures for FAA Air Traffic Services include Air Traffic Services' Operations, FAA's Facilities & Equipment, and FAA's Research & Acquisitions' Operations. This excludes funding for other FAA lines of business such as aviation regulation and certification, and aviation security.

In the area of research and development, NAV Canada officials told us that they avoid large research and development initiatives in favor of acquisitions that can return their investment in a shorter period of time. NAV Canada is relying on FAA for key emerging technologies, including satellite-based navigation systems and a new automated controller tool called the Center TRACON Automation System that provides controllers with sequences for landing aircraft.

Although relatively small in comparison to FAA, NAV Canada has made progress in developing new technologies for oceanic air traffic and eliminating the use of paper flight strips for controlling aircraft at some domestic facilities. NAV Canada's oceanic development efforts include aircraft surveillance and data link communications that are planned to be in use this fall. A similar effort for oceanic air traffic control in the United States—the Oceanic System Development and Support contract—was significantly reduced, largely due to technical and contractor performance issues, not a lack of funding. With regard to paper flight strips, FAA was unable to eliminate them in its domestic airspace because of controller concerns.

Because there is no frame of reference or experience base comparable to our ATC System that we can rely on for guidance, we urge great caution before proposing a major restructuring of what is already a very safe system, but a system also in need of improvement. In our opinion, the first course of action would be to implement a sound cost accounting system and effectively utilize the procurement and personnel reforms Congress has already given FAA. Second, if Congress decides to move toward commercialization, it must be done gradually in order to gain first-hand experience, and in a limited ATC environment, such as oceanic air traffic control in the Atlantic and the Pacific Oceans. The traffic load and mix handled by the United States oceanic environment is comparable in some important respects to that handled by some commercialized ATC enterprises, such as NAV Canada and Airservices Australia.

By proceeding in this manner, Congress and the aviation community would be able to judge what works well and what does not, identify refinements that need to be made, and assess whether a commercialized ATC organization should or should not be considered for broader application in the United States.

Oceanic Air Traffic Control

The International Civil Aviation Organization (ICAO) delegated to the United States responsibility for providing ATC services in over 80 percent of the world's

controlled oceanic airspace. There are labor, governance, financing, and transition issues that would have to be addressed if our oceanic ATC were to be operated by a commercial organization, but these issues are easier to resolve because the oceanic ATC environment is limited in scope. The commercialization of oceanic ATC would not be free from controversy; however, the issues involved are not nearly as complex or contentious as would be the case in the domestic ATC environment.

ATTRIBUTES OF FAA'S OCEANIC AIR TRAFFIC CONTROL

Mostly affects the large carriers who are suggesting commericalizing or privatizing ATC.

Operationally distinct from domestic ATC services.

Major ATC modernization and avionics standardization opportunities—FAA's schedules have slipped, modernization solution is not settled, and financing decisions have not been made.

Oceanic ATC operations projected to increase 5.4 percent annually.

Greater acceptance of user fees—Congress has already approved the collection of overflight fees, and other countries already collect fees for oceanic services.

Limited impact on controllers and labor agreements—only 300 of FAA's 14,900 controllers provide oceanic services.

Little impact on private (non-business) general aviation, small carriers, regional airlines, and air taxis.

ACQUISITION AND PERSONNEL REFORMS

In October 1995, Congress exempted FAA from the Federal procurement and personnel rules that FAA said hindered its ability to effectively modernize the Air Traffic System and acquire the staff and skills it needed to operate effectively. After 4 years, there has been some progress and FAA learned valuable lessons from its experience with the Advanced Automation System (the centerpiece of FAA modernization efforts in the late 1980's and early 1990's), but overall, these reforms have had limited impact on bottom line results.

At about the time these reforms were enacted, the Office of Inspector General, the General Accounting Office and others cautioned that neither procurement and personnel rules nor lack of funding were the source of the problems FAA was experiencing with its ATC modernization initiatives. Exemptions from Federal rules may facilitate success, but exemptions and additional funding are not substitutes for strong management including oversight of contractors, effective cost controls, and a sound cost accounting system. We find that FAA still has much work to do in these management areas, so we reiterate these cautionary notes today.

Acquisition Reform

The driving forces behind granting FAA relief from acquisition rules and regulations were escalating costs and schedule slips with FAA's air traffic control modernization efforts. Between 1992 and 1994 alone, the overall estimated costs of the modernization effort increased annually by about $1.2 billion due in large part to problems with key projects. For example, the expected cost of FAA's Advanced Automation System (AAS) had increased from $4.8 billion to over $7 billion with key segments behind schedule by more than 8 years. Of the $2.6 billion spent on AAS before it was restructured in 1994, about $1.5 billion could not be salvaged for use in other modernization projects.

Since the advent of acquisition reform, problems with major acquisitions have been less severe, but major benefits have yet to be realized. To its credit FAA has adopted a "build a little, test a little" approach to its acquisitions and has made progress in reducing the time to award contracts. FAA has deployed systems, such as the Display System Replacement (new en route controller displays) and the HOST (computers that receive, process, and track aircraft movement throughout the domestic en route and oceanic airspace), on time and within budget. Also, long-range surveillance radars, as well as Terminal Doppler Weather Radar that detects hazardous weather around airports, have been fielded. In the past these systems experienced significant cost and schedule problems.

However, problems persist with technologically challenging systems, such as the Wide Area Augmentation System (WAAS), Standard Terminal Automation Replacement System (STARS), and Airport Movement Area Safety System (AMASS). WAAS is a satellite-based navigation system; STARS is a replacement that will provide

new color displays, processors, and computer software for terminal facilities; and AMASS is a key safety technology designed to help controllers prevent accidents on airport runways. These three systems alone have cumulative program costs of over $4 billion, and are experiencing cost and schedule difficulties.

Cost and Schedule Variances in Key FAA Modernization Programs

	Estimated Total Program Cost		Scheduled Operations*	
Program	Original (in Millions)	Current (in Millions)	Original	Current
WAAS	$892.4	$2,900.0	1998	2000
STARS	$940.2	$1,400.0	1998	2002
AMASS	$59.8	$151.8	1996	2002

*Note: The scheduled operation date for WAAS represents Phase-1 Initial Operating Capability, for STARS represents first full service Operational Readiness Demonstration, and for AMASS represents last System Operational Readiness Demonstration.

The problems with these acquisitions are not the result of a lack of funding or the result of burdensome procurement and personnel rules. What all these systems have in common are difficulties with software development and human factors. For example, WAAS has experienced development difficulty in a critical software safety package that, among other things, determines the effects of the ionosphere on the WAAS signal and the validity of the WAAS message. The STARS schedule has been impacted by the software development needed to resolve computer-human interface issues and other new requirements. As a result of these problems, schedules have proven to be unrealistic and costs have increased.

FAA has taken steps to address problems with WAAS, STARS, and AMASS but only after major problems have surfaced. FAA can do more to protect the Government, make contractors more accountable, and address human factors issues earlier in the development and acquisition processes.

Our recent work on Free Flight Phase I—an initiative to introduce new automated controller tools and new information systems for FAA and airlines—shows the need to enhance contractor accountability and institute cost control mechanisms for software-intensive contracts. For example, two contracts for a software-intensive controller tool are time and material contracts. With these types of contracts, there is little positive incentive for cost control or labor efficiency—all risk is with the Government. FAA should negotiate contracts for software development with appropriate measures (cost ceilings, incentives, and earned value management techniques [1]) as well as methods for withholding payment if progress is not satisfactory.

In addition, FAA needs to identify and resolve human factors concerns early in the acquisition process to avoid cost overruns and schedule delays. The need for human factors work extends beyond the traditional computer-human interface issues for FAA systems, such as STARS, and has important safety and workforce implications. Key issues that require FAA's attention include the impacts on the selection and training of controllers as a result of new automated controller tools as well as the impacts on pilots from new data link communications and cockpit display technologies.

Key emerging technologies, such as data link communications for controllers and pilots, new automated controller tools, and new cockpit display technologies have far-reaching human factors implications. In addition to resolving these issues, a key management issue for FAA is to know when "enough is enough" with respect to human factors. FAA cannot satisfy everyone, and exit criteria is needed to make the tough decisions. In our opinion, without exit criteria, FAA's costs to resolve human factors issues in the STARS Program will continue to increase.

[1] Earned Value Management is a widely recognized way to measure technical progress with large scale, software intensive acquisitions. This management tool forecasts how much a program will cost and when it will be delivered.

In fairness to FAA, we must recognize that the development of new technologies, particularly those involving complex software and new aircraft avionics, involve research and development risks for which the United States bears much of the cost. Many of the firms developing these systems for FAA rank among the most technologically sophisticated in the world. Once developed, this technology is considered "off the shelf" and can be sold at a fraction of the costs to other ATC providers.

Personnel Reform

Personnel reform was designed to provide greater flexibility in hiring, training, compensating, and placing employees. FAA has had some success in that managers have been able to hire qualified candidates faster than they could under the Federal Personnel System. But, by far, the most visible result of personnel reform to date is a 5-year collective bargaining and compensation agreement reached with the controllers in 1998.

This agreement has markedly improved management-labor relations with the controllers, contains assurances of productivity gains in the future, and establishes a ceiling of 15,000 air traffic controllers. However, the price tag for this agreement is large, resulting in a sharp increase in the agency's costs of operations. FAA now faces significant risks in funding the new controller pay system while, at the same time, meeting other critical agency requirements funded by the Operations Account, such as hiring safety inspectors and developing a cost accounting system. These risks are compounded as FAA negotiates new wage agreements with its other workforces, such as maintenance technicians, who want similar treatment.

The costs associated with the new system are consequential from several points of view—the impact on a controller's wages; continued increases in the portion of the agency's total budget that goes to the Operations Account, comprised mostly of salaries; and the effects of the agreement on FAA's capacity to increase investment in ATC modernization.

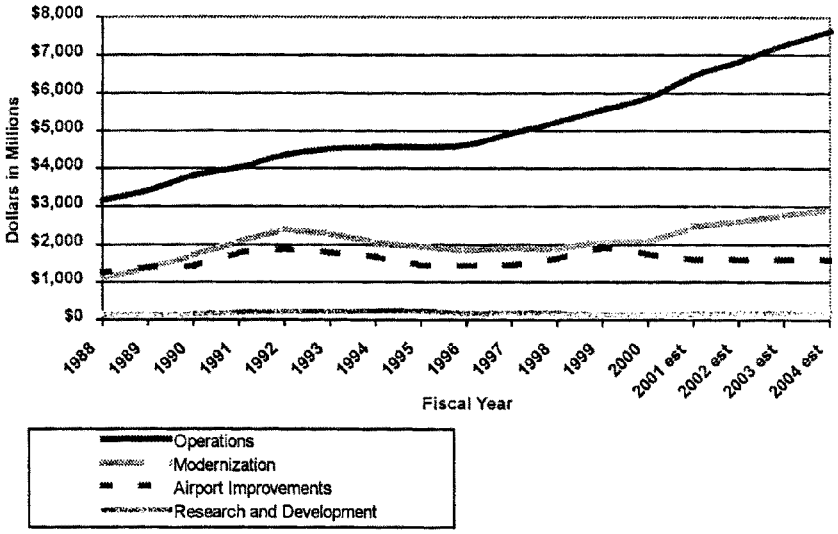
First, to illustrate the effect on an individual controller's wages, we looked at controller compensation before and after the agreement. Prior to October 1, 1998, the effective date of the new compensation package, air traffic controllers in the busiest facilities earned a base salary of up to $86,000. With the new compensation system, these controllers received a pay increase as high as 20 percent in base pay distributed over 3 years plus the annual Government cost of living increases. Currently, those air traffic controllers assigned to FAA's busiest air traffic facilities can earn about $111,000 before any premium pay is earned. When premium pay such as holiday, locality, and overtime are added, some of these controllers earn over $142,000 annually. By October of this year, they will earn over $147,000.

FAA estimates that its new compensation system will require nearly $1 billion in additional funding over the 5-year life of the new agreement. This additional cost takes into account anticipated savings from a gradual reduction in the number of air traffic supervisors.

Second, to illustrate the effect of the agreement on operations costs and capital investments in modernization, it is important to recognize that FAA's operations costs have been rising since 1992, with significant increases in the last 3 years. In fact, the United States invested more in fiscal year 1992 in modernization than it did in fiscal year 2000 ($2.4 billion in 1992 vs. $2.1 billion in 2000). But at the same time, the United States spent $4.4 billion on operations (mostly salaries) in fiscal year 1992, compared to an estimated $6.0 billion in fiscal year 2000. This trend shows no sign of abating.

The chart below illustrates increases in the cost of FAA operations, principally salaries, and the increasing disparity between the cost of operations (blue line) and the dollars available for modernization (yellow line). The chart shows why the increasing costs of FAA's operations must be contained.

FAA's Budget by Program
(FY 1988-2004)



FAA believes this problem will be partially mitigated by offsetting productivity gains, such as freezing the staffing level of 15,000 air traffic controllers for 3 years, eliminating 4-day work weeks at 24-hour facilities, and the performance of collateral duties by air traffic controllers. However, over a year after signing the agreement FAA is still trying to identify and quantify productivity gains.

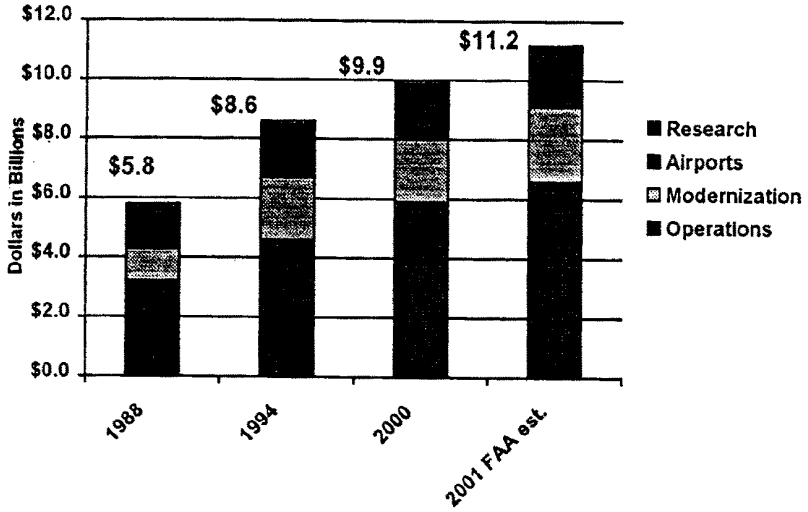
Last year, we recommended that FAA project the productivity offsets over the life of the agreement to better manage its future funding requirements. FAA did not agree, stating that a 5-year estimate would be speculative at best, relying too much on estimates regarding future aviation activity. In our opinion, it is not unreasonable to expect FAA to anticipate and plan for the costs associated with multi-year commitments. FAA needs to forecast and monitor projected revenues, savings, and productivity gains.

FINANCING FAA

Several proposals have surfaced over the past several years to finance FAA, all of which had one common thread—to increase the amount of funds available for FAA operations and air traffic control modernization efforts. While there are investment opportunities, additional funding alone will not improve FAA. There is a need for strong management controls, greater risk sharing with contractors, and a cost accounting system.

FAA's budget has increased nearly 73 percent from fiscal year 1988 to fiscal year 2000. Based on FAA's estimates, by 2004 its total budget requirements will be over $12 billion or 20 percent greater than fiscal year 2000. The means for financing these requirements is a major issue that the Department, Congress, and aviation users continue to debate.

FAA's Budget by Program
(FY 1988-2001)



FAA faces significant risks in meeting its operations cost increases without crowding out capital investments. As shown in the above chart, growth in the operations portion of FAA's total budget has constrained the funding available for modernization and airports. This occurs in an environment in which FAA's overall budget has continued to increase. Congress will need assurances that any additional funding for FAA will actually translate into capital investment and not be absorbed by FAA's operations.

For fiscal year 2000, FAA was financed entirely from the Aviation Trust Fund. However, this is only a short-term measure because FAA's projected expenditures exceed revenues generated through excise taxes. For example, this year, projected expenditures exceed revenue from taxes by over $700 million—this does not include interest earned.

Alternative methods or a mix of methods will therefore be needed to meet all of FAA's requirements. Suggestions include raising aviation taxes so that the trust fund receives an adequate infusion of receipts to cover the aviation budget; establishing user fees—an approach proposed by the Administration; tapping the general fund, which relies largely on Federal income taxes; and creating a general fund entitlement for FAA.

The method of financing FAA and the level of increased funding is a policy matter that ultimately is a judgment for the Congress. There are investment opportunities with data link communications, collaborative decision-making systems, and efforts to reduce runway incursions. It would be a disappointment for all if additional funds went to cover cost growth in existing acquisitions or if capital investments could not be made because they were crowded out by the increasing costs of salaries and related expenses. FAA should address three key fiscal issues in managing its current budget as well as any increases it may receive.

First, FAA's operations costs must be contained.—FAA's budget requirements continue to increase largely due to the rising costs in FAA's Operations Account. This account represents 60 percent of FAA's fiscal year 2000 budget and is expected to grow to nearly $7.6 billion or about 62 percent of FAA's budget by fiscal year 2004.

Second, risks with FAA's modernization efforts need to be shared.—Contractors share risks with FAA but more can be done, particularly with software intensive acquisitions. This becomes increasingly important as FAA moves forward with several major software-intensive acquisitions, such as WAAS and Free Flight Phase 1 automated controller tools. As we noted earlier, FAA should negotiate contracts with

appropriate controls to require contractors to share risks as well as provisions for withholding payments if progress is not satisfactory.

Third, a reliable cost accounting system must be in place.—FAA needs a cost accounting system to make sound financial and managerial decisions and support user fees. A cost accounting system helps an organization to accurately track and control its costs, which results in better decisions. However, the basic financial data have to be accurate and reliable. In past years, FAA's financial data were not reliable, which is why we have been unable to render a "clean" audit opinion on its financial statements. During fiscal year 1999, FAA made an extraordinary and labor-intensive effort to produce better financial data. We are currently auditing these data.

FAA is making progress in the development of its cost accounting system. FAA is currently developing the costs for providing its Oceanic and En Route services. FAA also intends to develop user fees, using its cost accounting system, to charge customers for the various services it provides. For example, FAA is currently developing user fees for flights that fly over the United States, but do not take off or land in the United States.

FAA originally planned for its cost accounting system to be fully implemented by October 1, 1998, but implementation is not complete. Earlier this year, FAA estimated its system would be fully implemented by September 30, 2001. However, FAA recently delayed the completion schedule until sometime in fiscal year 2002 because of funding constraints. FAA needs a reliable cost accounting system sooner, not later. FAA should reverse its decision and accelerate the implementation schedule for its cost accounting system.

In addition to implementing a cost accounting system, FAA needs to develop a strategic business plan—a key tool for any successful business. The plan should provide key corporate strategies and operating plans over the next several years, and describe the timing and impact of those strategies. The plan should outline agency strategies for investing in future technologies, as well as how the agency will control the rising costs of operations and bring about productivity enhancements.

Mr. Chairmen, this concludes our statement. I would be pleased to answer any questions.

Senator LAUTENBERG. We are interested but we are voting, and so please hold our interest in check and we will be back.

Senator DURBIN. Thank you, Senator Lautenberg. I have spoken to Senator Domenici, who will be returning shortly. I voted and came back to ask a few questions.

I thank you for your testimony today and for your service to our Nation in one of the most important agencies of the Federal Government. And I want to just say to Ms. Garvey that I have appreciated the contribution that you have made, and I have enjoyed working with you.

I hope that this Congress really establishes as its first priority the passing of the FAA Reauthorization Bill. There is so much at stake in this bill, beyond the obvious, construction at airports, safety modernization, and so many other issues.

In my home State of Illinois, we are watching closely because many downstate communities are unserved or underserved, and the slot rule at O'Hare is really the nexus of this debate. So we are hoping to see that resolved quickly.

I have three or four specific safety issues that I would like to get into. First I would like to discuss at this meeting what we have discussed privately. That is my suggestion that we consider adding new technology to the cockpits of our airplanes, and perhaps in other parts of the airplane, specifically, we are talking about video cameras in the cockpits.

Some 30 years ago, Congress, working with the airlines and the pilots, decided that in order to have valid investigation of accidents, audio recording and data flight recorders would provide the kind of information that might lead to a higher level of safety and fewer crashes. I think that they have served us well.

There was a compromise made at the time in the legislation, a 30-minute loop on the voice recorder. As it stands, I think it has served us well.

In 30 years, technology has changed dramatically. We are now facing video cameras when we go to ATM machines and convenience stores. We put them on school buses, in virtually every office building. They are ubiquitous. And we have to, I think, acknowledge that they have some value.

Certainly in the EgyptAir crash and other, more recent crashes, they might have provided information to resolve some very fundamental questions. What happened in that cockpit before that plane crashed? What can we do in the future to make it safer?

I have spoken to you about this and spoken to others, and I would like to ask you, Ms. Garvey: What is your position on this technology in the cockpit? If you believe that it could make our flights safer for American passengers and those from other countries who use our airlines, what can we do to implement this technology as quickly as possible?

Ms. GARVEY. Thank you very much, Senator. First of all, we think it holds great potential and should be looked at very, very seriously. Subsequent to our conversation, I met with Chairman Jim Hall from the National Transportation Safety Board, and he is in agreement. We are chairing together a group headed by John O'Brien from the Airline Pilot Association and also a government official. They are looking at all of the additional technologies, including the video cameras, that could be used to gather more information. And that is really what we are all about, trying to gather as much accurate information as we can. So that is very high on their list of issues to be considered.

We are expecting a report back from that committee later this spring or into the month of June, but we are very encouraged. We have talked with them and met with them a couple of times. I know they are taking this technology very seriously. I also would not be surprised to see even a more formal recommendation coming from the NTSB, but I think the chairman is also interested in seeing some additional recommendations that may come out of that group.

Senator DURBIN. And how soon can we expect a response, positive or negative, on this issue?

Ms. GARVEY. Well, I really think this summer, and perhaps we can even get it before then, but I know this summer is when they are presenting the formal report back to the chairman and to myself. So we will certainly have it by that time. But we will certainly talk with the committee members and see if there may be a couple of issues that they might want to advance, and that might be one. I will speak with Chairman Hall about that as well.

Senator DURBIN. I am not pushing for any particular technology or company, but I have met with some that are exploring this, and they have convinced me that these cameras, the lenses, can be unobtrusive and no obstacle to the orderly operation of an aircraft. They have also suggested that the video might be put in the cargo hold and some other places on the airplane that could be beneficial to determine the cause of accidents or perhaps even for insurance purposes to monitor whether or not—this is a problem, unfortu-

nately, but to monitor whether or not there are people smuggling on contraband, drugs and the like. This sort of thing might have many benefits beyond accident investigation, and I hope that that will be viewed seriously.

May I ask two or three other questions? When I get on an airplane and am urged by the flight attendants to put down my newspaper and listen to their instructions. One of the things that they focus on is the evacuation of an airplane—lighting along the aisles and where the exits are located and the like.

I would like to ask you a few questions about how much the FAA knows about the evacuation of airplanes. Someone told me recently they had flown in a Canadian airplane and found something very interesting. They don't put any seats in front of their exit rows. And, in fact, in the rows nearby, instead of three seats abreast, there are only two.

Yet if you get on an American plane—and not using American Airlines, but one in our country—that is regulated by our FAA, I think you would find it very difficult many times to get to that exit row. It is a very tiny passage, small passage for a lot of people who are supposed to evacuate in a short period of time.

What does the FAA do to establish whether or not you can evacuate a plane with 400 passengers? What kind of time frame do you have in place? What kind of decisions have you made about clearing that exit row that obviously the Canadians see a lot differently than we do?

Ms. GARVEY. Well, let me speak to that issue. We do a lot of testing in our offices in Oklahoma City, the Civil Aeromedical Institute (CAMI), which is—our research group does an enormous amount of testing, real-life testing, to see——

Senator DURBIN. With real people on airplanes coming off?

Ms. GARVEY. Yes, absolutely.

Senator DURBIN. How frequent? Has that been done on a regular basis?

Ms. GARVEY. It is on a pretty regular basis. I would have to get back to you with the most recent one.

Senator DURBIN. Well, I will tell you what I am told. I am told that that was done in years gone by, and now instead they are using computer models and theories. And I am just curious as to whether that is a fact.

Ms. GARVEY. Right. We are using some computer models, but we are also still doing the live testing at CAMI, and I can get the most recent.

But I can also tell you that we work very closely with a woman by the name of Helen Murrer, who is in Europe and who is one of the premier experts in this area, and have worked very, very closely both using our computer models and also having her review the kinds of evacuation testing that we are doing. She is recognized internationally. I have had the pleasure of meeting and talking with her. But I do think that is an issue you have to constantly look at. There are changes sometimes to the airplanes that make it worth re-examining.

[The information follows:]

The regulations (14 CFR 25.803 and Appendix J, Part 25) require that transport airplanes with more than 44 passengers be able to be evacuated in less than 90 sec-

onds, under prescribed conditions. The regulations permit actual tests, or a combination of tests and analysis. We believe our certification regulations ensure a safe evacuation given U.S. airlines' current passenger-seating configurations. For brand new airplane types, actual demonstrations with full passenger loads are almost exclusively required. Derivative, or follow-on, models are often substantiated with a combination of tests and analysis. Since all U.S. transport airplanes meet this 90-second evacuation requirement, we see no reason to require specific exit-row seating configurations. At this time, there is no computer model approved that would replace a full-scale demonstration, although this is an active area of research and development.

The FAA continues to conduct live evacuation testing at the Civil Aeromedical Institute (CAMI) in Oklahoma City. Testing is conducted on a regular basis of 3 to 4 times annually. Computer models are in development, however, those models have not proven effective to date, In May of 1999, CAMI published a research paper entitled "Passenger Management Strategies for Emergency Egress through Airliner Over Wing Exit". This paper was presented at the 1999 Airspace Medical Association meeting. CAMI is currently building a wide-body evacuation facility. Live testing will continue to be conducted and CAMI will also use the live testing to develop the parameter data for more reliable computer models.

Senator DURBIN. Are you under pressure from the manufacturers of airplanes or the airlines to keep those seats in the exit row so that they can have more revenue?

Ms. GARVEY. No, not at all, and I need to check—in fact, I am glad John is here. I will ask John Crichton a little bit later. But I need to check with what the Canadian experience is and why that is. I am just not familiar enough with it. But we are not under any—I mean, our issue is safety, and it has to be safety. So making sure there is an appropriate time for evacuation is absolutely critical.

There may be some point of differences with some of the flight attendants about whether or not we should use the computer models. We are pretty comfortable with the ones we have used. We have checked them out with international experts. But we are, again, continuing the real-life testing of CAMI as well.

[The information follows:]

The FAA has conducted extensive research to establish the minimum required passageway dimensions to Type III over-wing exits. The airlines have stated recently that they will provide additional leg room, which has prompted interest in the space provided at exits. The FAA has also begun the harmonization process with the European Joint Aviation Authorities to arrive at a common standard. There is a perception that airlines are willing to provide leg room to capture market share.

Senator DURBIN. May I ask one last question? I see my time is running out. A few years ago, I introduced a bill that banned smoking on airplane.

Ms. GARVEY. Thank you.

Senator DURBIN. You are welcome. And I took after the Canadian model. Again, they were ahead of us on this issue, and I give them credit. Northwest Airlines was the first domestic carrier to do this voluntarily, to ban smoking on airplanes, and now it is universal on our domestic flights. I hope that we can extend it in some fashion to international flights.

But let me ask you a question about air quality in general. I am told that not that long ago the transfer of air within a cabin of the aircraft used to occur every 3 or 4 minutes and that we have been degrading that standard to now 15 minutes for the transfer of air in a cabin because of some efforts to have fuel economy.

Now, I understand the airlines' problem. The cost of fuel has gone up some 25 percent. They have to deal with that as one of their costs of operation.

Can you tell me whether or not you have established a standard for air transfer in the cabins of aircraft and what it might be and whether it has changed?

Ms. GARVEY. Well, it is interesting that you raise this issue because I saw Senator Feinstein this morning, and she——

Senator DURBIN. She feels very strongly about this, too.

Ms. GARVEY. She spoke with me about that as well. Our medical unit within the FAA has been looking at this issue. I know we are working closely with the flight attendants on this issue. In fact, the Senator and I were speaking about it this morning. The most recent study that we are all familiar with I think has a standard that is a little lower than we are used to, and she raised some questions that we really, need to go back and take another look at that.

Senator DURBIN. Well, I wish you would.

Ms. GARVEY. We will do that for you.

Senator DURBIN. I think it goes beyond the obvious, stale air, the health aspects of it. Flight attendants, unlike those of us sitting in seats being waited on, are up and around and moving, and if they do not have a regular transfer of air and fresh air, it could impede their judgment or their ability to perform their jobs. And I hope that the FAA will look at that aspect of it.

Ms. GARVEY. We will get back to you both with the most recent studies and where we are going from here.

Senator DURBIN. OK. Thank you very much.

Ms. GARVEY. Thank you.

[The information follows:]

On July 5, 1996, Amendment 25–87, "Ventilation," to Title 14 of the Code of Federal Regulations, Part 25.831, became effective. This amendment introduced a requirement for new aircraft ventilation systems which states: "For normal operating conditions, the ventilation system must be designed to provide each occupant with an airflow containing at least 0.55 pounds of fresh air per minute." This is equivalent to 10 cubic feet per minute (cfm) for each occupant, which, prior to this amendment, was required only for crewmembers. It also ensures a more effective distribution of the air inside the aircraft cabin by providing each occupant, regardless of seating, with a minimum of 10 cfm of fresh air. While this requirement does not apply to existing aircraft, all newly certificated transport category aircraft are required to meet this new standard.

On September 9, 1994, an existing interagency agreement between the National Institute for Occupational Safety and Health (NIOSH), the Center for Disease Control and Prevention, and the FAA was amended to include a plan to determine the feasibility of designing and conducting a study of the chemical, physical, and microbiological aspects of aircraft cabin air quality. The research program implementation plans were included in a July 1995 initial report to Congress (attached).

The FAA continues to submit an annual report to Congress delineating the plans and actions the FAA has taken. The report also describes the participation of other groups interested in this FAA-NIOSH project. The fourth annual report will be sent to Congress at the end of March 2000.

U.S. DEPARTMENT OF TRANSPORTATION,
FEDERAL AVIATION ADMINISTRATION,
Washington, DC, December 29, 1998.

The Honorable ALBERT GORE, JR.,
President of the Senate,
Washington, DC.

DEAR MR. PRESIDENT: This is the third annual report of actions the Federal Aviation Administration (FAA) has taken in response to Section 304 of the Federal Aviation Administration Authorization Act of 1994, Public Law 103–305. Section 304 requires the FAA to conduct cabin air quality research and report to Congress annually on the progress. The FAA was also directed to contract with the Centers for Disease Control and Prevention and other appropriate agencies to carry out any studies necessary to meet the goals of the research program and to invite representatives of manufacturers, airlines, employee organizations, passengers, and academia to participate in the research program.

The third annual report contains information on the plans and actions the FAA has undertaken to study aircraft cabin air conditions, including aircraft cabin exposure assessments, cosmic radiation exposures, biological contaminant characterization, and in-flight disease transmission and symptomology research. Most of the research effort is being conducted by the FAA in collaboration with the National Institute for Occupational Safety and Health (NIOSH). The report also describes the participation of other groups interested in this FAA-NIOSH project.

An identical letter has been sent to the Speaker of the House of Representatives.

Sincerely,

JANE F. GARVEY,
Administrator.

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FEDERAL AVIATION ADMINISTRATION,
Washington, DC, December 29, 1998.

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JANE F. GARVEY,
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FEDERAL AVIATION ADMINISTRATION REPORT TO CONGRESS ON AIRCRAFT CABIN AIR QUALITY RESEARCH PROGRAM

EXECUTIVE SUMMARY

Section 304 of the Federal Aviation Administration Authorization Act of 1994, Public Law 103–305, requires the Federal Aviation Administration (FAA) to establish a research program and to report to Congress annually on its findings in aircraft cabin air quality research. This is the third annual report. On September 9, 1994, an existing Interagency Agreement between the National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention, and

the FAA, was amended to include a plan to determine the feasibility of designing and conducting a study of the chemical, physical, and microbiological aspects of aircraft cabin air quality. The research program implementation plans were included in a July 1995 initial report to Congress. This report updates the status of the research program and details our future research plans.

BACKGROUND

In 1993 and 1994, Congress held hearings to address complaints from flight attendants and passengers regarding aircraft cabin air quality. Those individuals stated their belief that there is less fresh air in aircraft because air is recirculated to conserve fuel. Concerns were also expressed about a possible relationship between cabin air quality and the contraction (transmission) of infectious diseases and causation of other medical symptoms.

On July 5, 1996, an amendment to the Code of Federal Regulations, 14 CFR 25.831, Amendment 25–87, entitled "Ventilation," became effective. This amendment introduced a requirement for new aircraft ventilation systems that reads as follows: "For normal operating conditions, the ventilation system must be designed to provide each occupant with an airflow containing at least 0.55 pounds of fresh air per minute." This is equivalent to 10 cubic feet per minute per occupant, which, prior to this amendment, was required only for crewmembers. While the new requirement does not apply to existing aircraft, all newly certificated transport category aircraft are required to meet this standard.

Transport category aircraft are pressurized by introducing fresh air through the aircraft's air conditioning system and into the cabin and cockpit of the aircraft. The pressure altitude inside the aircraft is maintained by electronically controlling the exit of air from the fuselage through an outlet valve. For crew and passenger comfort and safety, the regulations for certification of transport category aircraft require that the cabin pressure altitude be maintained at no higher than 8,000 feet, when the aircraft is at its maximum altitude. The original aircraft design, established at the time of certification, dictates the minimum fresh airflow rate that must be supplied to meet certification requirements. The flightcrew has the flexibility to vary the amount of fresh air introduced into the aircraft while still meeting the required minimum dictated by the aircraft design. The certification requirements addressing limits on carbon dioxide, carbon monoxide, and ozone concentrations in the aircraft cabin, however, must still be met.

While certain measures may be taken by an air carrier to conserve fuel, these measures must not result in a violation of the regulations or create unacceptable or hazardous cabin air conditions for aircraft occupants. Past studies that have included measurements of cabin air quality conditions during aircraft flights have focused on gaseous components, and have revealed that cabin air quality was within acceptable and safe limits. However, the new FAA–NIOSH research has also incorporated analysis of bioaerosols, cosmic radiation, circadian shifts, and ergonomic factors to address remaining health concerns.

The FAA issued a notice of proposed rulemaking (NPRM), "Allowable Carbon Dioxide Concentration in Transport Category Airplane Cabins," which was published in the Federal Register on May 2, 1994. This notice proposed revisions to the standards for maximum allowable carbon dioxide concentration by reducing the allowable maximum concentration from 3 percent to 0.5 percent in occupied areas of transport category aircraft. A final rule became effective on January 2, 1997.

ACTIONS TO IMPROVE CABIN AIR QUALITY

The existing Interagency Agreement between NIOSH and the FAA, as amended on September 9, 1994, authorized efforts to design and conduct studies of chemical, physical, and microbiological aspects of aircraft cabin air quality. An additional Interagency Agreement was signed in January 1997. This agreement incorporates two new studies providing indirect approaches to the understanding of possible disease transmission within the aircraft cabin, in-flight symptoms, and other health effects that may result from changes in cabin air quality (GAO) or other environmental factors. Systematic epidemiological studies of broad categories of disease transmission in the aircraft cabin environment were not considered feasible with available technology. Additionally, appropriate biomarkers for transmission of upper respiratory diseases and microbiological detection methodologies were not considered adequately developed to support direct field study designs. In addition to the CAQ activities described in this report, FAA and NIOSH investigators agreed that during fiscal year 98–99 they would revisit and update their understanding of the technical issues concerning the study of in-flight disease transmission.

ORIGINAL FAA–NIOSH AIRCRAFT CABIN EXPOSURE ASSESSMENT STUDY

During 1995, the Cabin Exposure Assessment Study plan was drafted after a thorough assessment of the methods and instrumentation for evaluating cabin air quality, including exhaustive performance tests in standard laboratory and in hypobaric atmospheres. The objectives of the continuing 1996–1999 Exposure Assessment Study are to: (1) characterize cabin air quality parameters and cosmic radiation exposures onboard commercial aircraft for a variety of flight routes, duration of flight time, and aircraft types, and (2) provide exposure data for the epidemiological study of reproductive health in female flight attendants. The dual objectives of characterizing cosmic radiation exposures (which depend heavily on altitude and proximity to geomagnetic poles) and aircraft cabin air quality require a study design with flights stratified across different routes, latitudes, aircraft types, and flight durations. Short (<2 hours), medium (2–8 hours), and long (>8 hours) flights were planned over north-south routes and east-west routes including equatorial and near-polar flights. Eleven of the most common aircraft types, as identified in Air Transport Association (ATA) U.S. fleet demographics, were included. Measurements of cabin air quality and cosmic radiation data were collected on commercial flights of four airline companies. Indoor air quality parameters monitored on each flight include carbon dioxide, carbon monoxide, nitrogen oxides, environmental tobacco smoke (as nicotine), ozone, volatile organic hydrocarbons, temperature, humidity, relative pressure, airborne total particulate mass, and inhalable particulate mass. A combination of validated active sampling methods and direct-reading data-logging instruments were used for continuous cabin environment data collection during each flight.

Data collection on eight flights was completed in 1996 on two airlines as part of a feasibility study. After scientific peer review of the protocol in 1996, exposure monitoring on an additional 25 flight segments commenced in April 1997 and was completed in June 1998. Laboratory analyses of samples was completed in October 1998. Data analyses will be completed by summer of 1999.

Data and results from the full complement of 33 flights will be presented in the FAA's 1999 annual report to Congress. A preliminary review of some of the cabin air quality data has shown that 1-minute average concentration ranges were: carbon dioxide 540–2879 ppm; ozone <0.01–0.47 ppm; carbon monoxide <1.0–4.4 ppm; nitrogen oxides <0.3–0.7 ppm; and total particulates <0.02–0.04 mg/m^3. Carbon dioxide exposures were highest during periods of passenger activity and varied among different aircraft models. Once all results are available for analysis, the relationships between contaminant levels and aircraft type, passenger load, flight length, and other factors can be explored.

COSMIC RADIATION EXPOSURES

In the Cabin Exposure Assessment study, characterization of cosmic radiation exposure is accomplished using two portable tissue equivalent proportional counters (TEPC). The TEPC instruments, built by Battelle Pacific Northwest Laboratory under contract to the FAA, are capable of recording the energy deposition spectra from the TEPC into 256 channels of data. The instrument fits within the confines of a carry-on suitcase. The instruments are placed near each other in the overhead bins of the aircraft to provide a measure of reproducibility and precision in cosmic radiation dose. The TEPC is considered the best instrument for measuring biological harm in the cosmic radiation environment.

The epidemiology study requires estimates of cosmic radiation exposure for many thousands of flights. The best available method for estimating these exposures is a program developed at the Civil Aeromedical Institute. Calculations to date, with the latest version of the program, are within +9 to −32 percent of TEPC measurements. However, the program calculates effective dose, whereas the instruments measure dose equivalent. Effective dose is the preferred quantity for radiation protection purposes. Although dose equivalent and effective dose are both estimates of biological harm, the quantitative relationship between the two is unknown (and will be investigated). No instrument currently available measures effective dose. Considering the uncertainties in the measurements and calculations, the use of two independent methods of estimating biological harm was considered desirable. Comparisons between the two methods indicate they are in reasonably close agreement.

Average TEPC dose equivalent measurements for the first 17 flight segments (conducted during 1997–1998) ranged from 0.64 to 57.7 microsieverts. Dose equivalent rates based on block hours ranged from 0.91 microsieverts/hour (Kotzebue, Alaska, to Nome, Alaska) to 6 microsieverts/hour (Seattle to Miami). Based on these data, annual radiation dose equivalents for a flight attendant flying 900 block hours per year would range from 0.819 to 5.4 millisieverts, well below the occupational

limit of 20 millisieverts/year (5 year average) recommended by the International Commission on Radiological Protection and the FAA.

BIOLOGICAL CONTAMINANT CHARACTERIZATION

Endotoxins were selected from the broad class of biocontaminants for monitoring aboard aircraft on four flights. Endotoxins are a component of the membrane of gram-negative bacteria (GNB) and are composed of lipopolysaccharide (LPS). Upon inhalation, endotoxins may induce intracellular changes in inflammatory and immune system cells through macrophage activation. Several studies have investigated the relationship between endotoxin and health effects or symptoms in indoor environments. In a study of 19 Dutch office buildings, a dose-response relationship was found between airborne endotoxin levels and building-related (including respiratory) symptoms, with air concentrations six times higher in high symptom prevalence buildings compared to low symptom prevalence buildings. A study of 12 Danish town halls found the prevalence of GNB in floor dust was significantly correlated to general symptoms and to mucous membrane symptoms. A Swedish study of endotoxin levels in air and dust from homes showed a dose-response relationship for airborne endotoxin and cough, breathing difficulties, itchy eyes, and tiredness. Although studies of endotoxin levels in homes, office buildings, and other indoor environments have been conducted, no data are available for commercial aircraft cabins.

Although endotoxin bioactivity quantitation via the standard *Limulus* bioassay has been applied in many environments, an emerging chemical assay for endotoxin via 3-hydroxy-fatty acid (3-OHFA) quantitation provides additional information about possible bacterial sources of LPS. Three-OHFA's are characteristic for endotoxin-associated LPS, and the relative distributions of individual 3-OHFA's differ among species of GNB. This chemical assay shows promise as a more stable method than the Limulus assay. Analyses of 3-OHFA's may lead to a better understanding of the health implications of the endotoxin-associated dust since the ratio of endotoxin activity to total 3-OHFA is an indication of the potency of the dust sampled, which may differ by environment.

Air and dust samples were collected during four flights on commercial aircraft in June 1998. Air samples were collected in coach class at 4 locations per flight with 2 replicates per location (32 total on 4 flights). Surface sampling of dust was performed on both seats and carpet. Eight seats and 8 carpet locations were sampled per flight (32 total seats and 32 total carpet samples). Analyses will be completed by October 1998. The results should permit comparisons of endotoxin activity and 3-OHFA's in aircraft cabins to other indoor environments where dose-response relationships between endotoxin levels and building-related symptoms have been demonstrated.

IN-FLIGHT DISEASE TRANSMISSION AND SYMPTOMATOLOGY RESEARCH

With the signing of the January 1997 Interagency Agreement between the FAA and NIOSH, work began on in-flight disease transmission and symptomatology research. In a related effort, the FAA Office of Aviation Medicine worked closely with the Centers for Disease Control and Prevention and the Air Transport Association on the issue of transmission of tuberculosis in aircraft.

A 5-year FAA–NIOSH research program to address broader disease transmission issues has been developed for the fiscal year 1997-fiscal year 2002 timeframe. Two studies have been proposed to evaluate the possibility of disease transmission, symptoms, and health effects from changes in cabin air quality or other factors.

The first disease transmission study incorporates a respiratory symptomatology assessment into ongoing FAA–NIOSH research. The original research, in partnership with the Department of Defense (DOD) Women's Health Research Program, was primarily focused on reproductive health issues of female flight attendants. As part of this program, in fiscal year 1998, approximately 7,000 women (flight attendants and teachers) were asked in a 1-hour telephone interview to answer a reproductive history questionnaire to examine past reproductive outcomes. The teachers serve as a comparison population for the study. Precise work history and personnel data are being collected from three airlines and corresponding teacher unions. Data analyses will begin in early fiscal year 1999.

The reproductive history questionnaire, referenced in the previous section, now contains a panel of respiratory symptomatology questions excerpted from national surveys, including the National Health Interview Survey (NHIS). These questions address respiratory symptomatology (of both infectious and noninfectious etiology) for current and last-year time periods. In the context of complete work (flight) history data and lifestyle factor data, these symptoms can be analyzed in depth, evalu-

ating the relationship between flight activity and symptomatology and controlling for lifestyle factors. In addition to the predominantly nonflying comparison group of teachers, a second large comparison population is available from the NHIS questionnaire data. It is unlikely that a respiratory system symptom survey of this depth or quality could be independently conducted outside the ongoing study, since concurrent collection and analysis of detailed work history data is rarely conducted outside NIOSH. Additionally, this would be prohibitively expensive if structured as a free-standing effort.

The second disease transmission study in fiscal year 1997 through fiscal year 2002 utilizes cabin air exposure modeling. Very little information regarding infectious diseases in the cabin air environment and their potential for person-to-person transmission is available. The number and size of occupant-generated bioaerosols and their dispersal and removal from the aircraft cabin are not known. This project evaluates the dispersal and removal of bioaerosols generated by aircraft cabin occupants in order to answer two important questions: (1) What are the major factors that determine the spread of human bioaerosols in the cabin air environment? and (2) How can this information be used to improve new aircraft design or to retrofit existing equipment?

Experimental methodology from current NIOSH projects can be appropriately modified to determine the factors that may affect the transmission and level of bioaerosols in an aircraft cabin. These factors may include airflow patterns, ventilation characteristics, the number of particles in expired air, humidity, filter efficiencies, and breathing patterns. Software is under development to control simultaneously multiple aerosol measuring devices while video recording human activities responsible for bioaerosol generation. The system is capable of activities for the upcoming fiscal year include conducting the adapted tracer gas tests to measure the age of air in aircraft that are on the ground with their ventilation systems operating. CFD modeling of cabin airflows will begin. Also, experimental work to evaluate aircraft cabin airflows using a variety of techniques will begin in cabin mockups. The results of the biological literature and methods survey will be available. These results will be used to formulate a sampling plan for bioaerosols on commercial aircraft.

PARTICIPATION OF OTHER GROUPS IN THE FAA–NIOSH PROJECT

The FAA Office of Aviation Medicine (AAM) also continued collaborating on aircraft cabin environmental quality issues. AAM participates in the Aviation Subcommittee of the ASHRAE Technical Committee (TC 9.3) and, as a nonvoting member of the ASHRAE Standards Committee, SPC 161, Air Quality Within Commercial Aircraft. In June 1997, the ASHRAE Aviation Subcommittee contracted for a cabin air quality study ($150,000), which is designed to complement the FAA–NIOSH research. Through FAA's interaction with ASHRAE, FAA's Civil Aeromedical Institute provided valuable guidance and assurance that products from the ASHRAE research contract would be integrated into the ongoing FAA–NIOSH study. As specific examples, the FAA member recommended that air contaminant samples be collected in the breathing zone of aircraft occupants; that samples be analyzed by the same method that is used by the organization that promulgated the standard; and that occupant exposures be evaluated on a time-weighted average basis from closing the cabin door—throughout the flight—to opening the cabin door. The FAA member also recommended the minimum ventilation requirements (cubic feet per minute per occupant) to ensure that maximum sustained levels of carbon dioxide exposure and cabin air changes per hour meet the requirements of FAR 25.831, "Ventilation."

The airline trade associations and unions have been supportive of this project, encouraging their members to participate in critical retrievals of work history and in questionnaire participation. Much of this support was garnered through the "trust building activity" of NIOSH personnel supporting this project.

The FAA will continue to conduct a cabin air quality research program and report to Congress annually on its findings.

U.S. DEPARTMENT OF TRANSPORTATION,
FEDERAL AVIATION ADMINISTRATION,
Washington, DC, July 24, 1995.

The Honorable ALBERT GORE, JR.,
President of the Senate, Washington, DC.

DEAR MR. PRESIDENT: This is the initial report of actions the Federal Aviation Administration (FAA) has taken in response to Section 304 of the Federal Aviation Authorization Act of 1994, Public Law 103–305. Section 304 requires FAA to conduct

cabin air quality research and report to Congress annually on the progress made. The FAA was also directed to contract with the Centers for Disease Control and Prevention to carry out any studies necessary to meet the goals of the research program and invite representatives of manufacturers, airlines, employee organizations, passengers, and academia to participate in the research program.

The initial report contains information on the plans and actions FAA has undertaken to study certain factors related to cabin air conditions, including pressure altitude systems, temperature, air circulation rates, and potential health impacts. The first annual report will be provided to Congress in August 1996.

An identical letter has been sent to the Speaker of the House of Representatives.

Sincerely,

DAVID R. HINSON,
Administrator.

U.S. DEPARTMENT OF TRANSPORTATION,
FEDERAL AVIATION ADMINISTRATION,
Washington, DC, July 24, 1995.

The Honorable NEWT GINGRICH,
Speaker of the House of Representatives, Washington, DC.

DEAR MR. SPEAKER: This is the initial report of actions the Federal Aviation Administration (FAA) has taken in response to Section 304 of the Federal Aviation Authorization Act of 1994, Public Law 103–305. Section 304 requires FAA to conduct cabin air quality research and report to Congress annually on the progress made. The FAA was also directed to contract with the Centers for Disease Control and Prevention to carry out any studies necessary to meet the goals of the research program and invite representatives of manufacturers, airlines, employee organizations, passengers, and academia to participate in the research program.

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DAVID R. HINSON,
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REPORT TO CONGRESS ON THE FEDERAL AVIATION ADMINISTRATION'S ACTIONS ON AIRCRAFT CABIN AIR QUALITY RESEARCH PROGRAM

REPORT OF THE FEDERAL AVIATION ADMINISTRATION TO THE UNITED STATES CONGRESS PURSUANT TO PUBLIC LAW 103–305, SECTION 304 OF THE FEDERAL AVIATION ADMINISTRATION AUTHORIZATION

EXECUTIVE SUMMARY

Section 304 of the Federal Aviation Administration Authorization Act of 1994, Public Law 103–305, requires the Federal Aviation Administration (FAA) to establish a research program and report to Congress annually on the actions it is taking to conduct aircraft cabin air quality research. FAA was also directed to provide Congress with an initial plan to implement the program. This report contains information on the program actions FAA has taken to comply with these directions and with the requirement to contract with the Centers for Disease Control and Prevention to conduct this study.

BACKGROUND

In 1993 and 1994, Congress held hearings to address complaints from flight attendants and passengers regarding air carrier cabin air quality. These individuals expressed concern about cabin air quality and stated their belief that there is a reduction of fresh air in aircraft because air is recirculated to conserve fuel. Other concerns were raised about the possible relationship between cabin air quality and occupant symptoms, as well as the contracting of infectious diseases.

Currently, the language in 14 CFR 25.831, "Ventilation," states that each passenger and crew compartment must be ventilated, and each crew compartment must have enough fresh air (but not less than 10 cu. ft. per minute per crewmember) to enable crewmembers to perform their duties without undue discomfort or fatigue.

Transport aircraft are pressurized by introducing fresh air through the aircraft air conditioning system and into the cabin and cockpit of the airplane. The "altitude" inside the aircraft is controlled by allowing air to exit the fuselage through an electronically controlled valve. The regulations which are used to certify transport category aircraft require that the cabin altitude be maintained at not more than 8,000 feet, when the aircraft is at its maximum altitude, for crew and passenger comfort and safety. The original aircraft design, established at the time of certification, dictates the minimum fresh airflow rate that must be, supplied to meet certification requirements, but there is some flexibility allowed in meeting these requirements. The flightcrew can vary the amount of fresh air introduced into the aircraft while still meeting the required minimum dictated by the aircraft design. The certification requirements addressing limits on carbon dioxide, carbon monoxide, and ozone concentrations in the aircraft cabin, however, must still be met.

While certain measures may be taken by an air carrier to conserve fuel, these measures are not expected to result in a violation of the regulations or unacceptable or hazardous cabin air conditions for aircraft occupants. Studies have been conducted in the past to measure conditions of cabin air quality on airline flights. These studies have shown that the cabin air quality was within acceptable and safe limits.

ACTIONS TO IMPROVE CABIN AIR QUALITY

In November 1989, Notice 89–31, Standards for Approval for High Altitude Operation of Subsonic Transport Airplanes, was published in the Federal Register. The intent was to incorporate the requirements in the FAR for a number of special conditions that had been issued for operation of several (mostly small) jet transports to enable operation above 41,000 feet up to and including 51,000 feet. The current Part 25 requirements do not cover such high altitude operations.

One of the proposals in Notice 89–31 was to revise section 25.831(a) of the FAR to require that each occupant be supplied with 0.6 pounds of fresh air per minute, which is approximately 10 cubic feet per minute (CFM). The current rule requires 10 CFM per crewmember. With this higher airflow, using accepted analysis methods, the carbon dioxide level in the passenger cabin would be 0.125 percent. The proposed new rule would apply to all new airplanes in the certification process. The final rule is now in coordination and is expected to be issued in 1995.

The FAA issued a notice of proposed rulemaking (NPRM) which was published in the Federal Register on May 2, 1994, titled "Allowable Carbon Dioxide Concentration in Transport Category Airplane Cabins." This notice proposed revisions to the standards for maximum allowable carbon dioxide concentration by reducing the allowable maximum concentration from 3 percent to 0.5 percent in occupied areas of transport category airplanes. Such modifications could reduce the complaints of poor air quality and the sense or perception of "stuffiness," associated with higher concentrations of carbon dioxide. Comments on the NPRM have been received and are under review. A final rule is anticipated in 1995.

RESEARCH PROGRAM IMPLEMENTATION PLANS

FAA's plan to perform aircraft cabin air quality research contains a number of elements. These include modifying, by amendment, the formal agreement with the National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention, to conduct an epidemiological study and undertake other study activities; establishing research protocols, including survey flights and sampling; and initiating liaison with both Government and non-Government organizations to assist in this study, develop test protocols, and provide peer review. These program plans are described below.

The statute directing FAA to conduct a research program on cabin air quality, including pressure altitude systems, calls for an examination of conditions that could be harmful to the health of airline passengers and crew, as well as the risk of airline passengers and crew for contracting infectious diseases during flight.

On September 9, 1994, an existing Interagency Agreement between NIOSH, Centers for Disease Control and Prevention, and the FAA, was amended to include a plan to determine the feasibility of designing and conducting a study of chemical, physical, and microbiological aspects of cabin air quality. NIOSH has initiated a literature review of cabin air quality studies and, in addition, sampling methods for the analysis of all relevant aircraft cabin contaminants are being evaluated to establish the most efficient and meaningful research protocol.

FAA has established liaison with appropriate technical specialists at the National Aeronautics and Space Administration, Boeing, and other organizations to assist the agency in development of the optimal testing protocols and to obtain peer review for the cabin air quality research. Special relationships have also been established

with the American Society of Heating, Refrigeration, and Air-Conditioning Engineers Aviation Subcommittee. This group has undertaken an initiative to establish consensus standards for minimum fresh air ventilation rates in the air carrier aircraft cabin environment.

The FAA is proposing that NIOSH undertake a 5-year epidemiological study to address disease transmission in the cabin environment.

In fiscal year 1995, approximately six to eight survey flights will be conducted to develop protocols for the collection of chemical and physical air quality data and to test instrumentation to be used in the data collection. A proposed total of 22 to 24 survey flights will be conducted and are scheduled to be completed in fiscal year 1996. Flights will be chosen depending on aircraft model and flight duration, taking into account other factors which impact aircraft cabin air quality, such as passenger load, smoking exposure, and filter efficiency.

Demographics of the major U.S. airlines will be used to determine which aircraft types should be evaluated in the study. For example, the six aircraft types most prevalent in U.S. operating airline fleets are the B727, B737, MD80, DC9, B757, and DC10. A key component of the new study will be the selection of optimal measurements to determine microbial loads onboard aircraft. These measurements will be critical to the related study that addresses the relationships between aircraft cabin environmental conditions and occupant symptomatology and the risk of contracting infectious diseases.

The FAA/NIOSH Research Program has been designed to meet the goals stated in Section 304 of Public Law 103–305. This research program will specifically determine what, if any, aircraft cabin air conditions, including pressure altitude systems on flights within the United States, are harmful to the health of airline passengers and crew, as indicated by physical symptoms such as headaches, nausea, fatigue, and lightheadedness. It will also assess the risk of airline passengers and crew contracting infectious diseases during flight.

Senator CONRAD. Thank you for being here today, and I want to thank, in absentia, Chairman Domenici for holding this hearing and Chairman Shelby for being here as well. I think this is critically important.

I am on the FAA reauthorization conference committee as a member of the Budget Committee, and I would like to share a somewhat different perspective than we have heard, at least while I was here this morning before I had to leave for the vote. We heard a lot of talk about money not being able to solve problems. That is certainly the case. Money doesn't solve all problems. But an absence of money, when there is real need, creates its own problem. And I want to say I believe we need more money for airport expansion or airport modernization for FAA, and the need is just as clear as it can be.

We have 600 million air passengers a year now. We are being told it will be a billion passengers within the next decade.

Now, you are not going to service those passengers. You are not going to be able to deal with the capacity needs of the airports of this country. You are not going to be able to prevent enormous gridlock in the Air Transportation System of the United States without substantial increases in funding. And anybody that has worked with me over the 14 years I have served in the United States Senate knows that I am a deficit hawk, that I have been relentless in wanting to eliminate the deficits, and we are at that day, thank goodness. We are able to balance our budget without counting Social Security, which is a dramatic improvement over where we were just 8 years ago.

But as a deficit hawk, I also recognize there are other needs in this country as well. And unless we address this one, we are going to hamper the economic efficiency of this economy because transportation is right at the heart of an effective economic system in

America. And I defy anybody to explain to me how you go from 600 million air passengers a year to a billion and not spend more money to deal with the challenges.

Those of us who fly frequently know what is happening. Delays of more than 15 minutes are up 20 percent—something over 20 percent. I tell you, I am experiencing it. This last weekend I was flying home to North Dakota, got up at 5 o'clock in the morning for a 6 o'clock flight, and, you know, we all get on the plane, and then they come with their announcement that I have had many, many times: We have a mechanical problem; it will be 15 minutes to an hour and 15 minutes, and we will have it fixed. We all get off the plane. After 45 minutes, they come on and say: It will be 15 minutes to an hour and 15 minutes before we are able to leave. You know, then they get into it and they find there is more problems than they anticipated, and it is 3½ hours before you leave.

Now, that meant that I missed a series of commitments, and it meant all the other folks in that plane probably missed commitments. That has a real effect on the efficient functioning of our economy. And the fact is reliability is declining, and we are going to have to put more money into this system. That doesn't mean you just throw money at the system. It does have to be done in a way that people are held accountable.

I want to salute you for the work that was done to avoid the Y2K problems that all of us were anticipating. Goodness, what a remarkable event that turned out to be. We all woke up, virtually no problems. And I salute you for the excellent work that you did. I know enormous time and energy was spent on making certain that the air transportation system in this country was safe and functioned without problem. And I think you deserve public credit.

There are three matters that I would like to raise with you that affect my State. First of all, I want to thank you for dealing with the air traffic control situation that affects Minot Air Force Base in Minot, North Dakota. You acted, and acted properly, I believe, to leave that matter of air traffic control with the Minot Air Force Base because of the nuclear deterrence responsibilities of that Air Force base. And I very much appreciate the way you responded to that need. And I can tell you that the commander of that Air Force base and the head of the Air Force appreciates the cooperative spirit of the FAA in resolving that matter.

Second, on essential air service, we have four North Dakota communities that are covered by the EAS Program, but we are having very significant problems with respect to the reliability of that service in North Dakota, especially with respect to Great Lakes aviation: repeated cancellation of flights, repeated failure to provide service, and problems really that need to be addressed during.

During consideration of FAA reauthorization, I got an amendment passed that requires DOT and FAA to come up with a plan to make EAS more sustainable, more reliable, and I would just encourage you, even though that bill is still in conference, to proceed to review those issues.

Is that something that you could do pending the completion of FAA reauthorization?

Ms. GARVEY. Senator, certainly we can review them. Those are really understand the jurisdiction of the Secretary's office, the De-

partment of Transportation, but both Assistant Secretary Basso and I will make sure that gets back to the right office and make sure that that review takes place. We are very much aware of those issues, as you were describing them, and the criticality of having that kind of service for communities really is—essential air service is exactly the right name for it.

So we appreciate those issues, and we will respond and deal with them.

Senator CONRAD. Well, we do have serious problems.

On a final note, I want to also thank you for dealing with the question of the width of the runway at Minot Airport.

Ms. GARVEY. Yes.

Senator CONRAD. FAA had been indicating they would only fund a 100-foot-wide runway, and when we were able to get written confirmation from Northwest Airlines that they intended to serve that market with Airbus A320 aircraft that required a 150-foot runway, FAA responded and indicated that they would fund a 150-foot-wide runway. And I would just like to confirm that again here this morning.

Ms. GARVEY. That is correct. Yes, exactly right, Senator.

Senator CONRAD. Well, I appreciate that.

Ms. GARVEY. Thank you.

Senator CONRAD. I would just like to add a final if I could on the point that Senator Durbin made.

Senator DOMENICI. It is your time.

Senator CONRAD. This air recirculation question I think is an important question. I have constituents that mention this to me, and I believe it is a problem. I would very much hope that the FAA would go back and revisit the question of what the requirements are and that we have a recirculation more frequently of air in these aircraft.

I have had doctors tell me that there is an epidemic of illness as a result of the close confines of aircraft. In fact, the Capitol physician has told us that they are seeing just an epidemic of communicable illnesses being spread in aircraft and that part of the reason is that we are not recirculating the air frequently enough. And I very much hope that that would be investigated.

Thank you, Mr. Chairman.

Senator DOMENICI. Let me apologize for my absence. I hope—in fact, I know matters were handled very well in my absence, and nobody went to war, nobody got mad at each other. Isn't that nice?

I want to just suggest that one of the reasons that I have undertaken oversight hearings this year—and I am sorry that I don't have 3 months instead of one to do some oversight hearings—is not because we have authority to write laws in these areas. Everyone here knows we don't. But I have been part of producing a budget and 13 appropriation bills for 25 of the 27 years I have served here. And I have come to the conclusion that our procedures do not allow enough time for authorizing committees to have hearings about the matters within their jurisdiction and to actually find out whether the programs they are funding and that they have authorized sometimes 50 years ago, 30, 20, whether they are still worthwhile.

Well, I am pleased to announce that in the United States House they are way beyond a majority of members who have joined in a

resolution saying let's have appropriations and budgeting every 2 years, and thus, that would leave some time for something else, like oversight.

I submit, however, that from your standpoint, as being on the executive side—and I would ask if I am correct—if you didn't have to submit a budget every year, it would permit you a great deal more time to oversight the department that you run.

I just got a note yesterday that a little tiny funding in one of my bills, Corps of Engineers at $3.7 billion a year, they must do a budget every year. The budget is eight volumes long. Eight volumes, 20,000 pages, for $3.7 billion, one small department of the government every year, every year. Then they must do hearings on appropriations, then appropriating, then we all go back and have a Christmas sleep. And guess what? Budget appropriation again.

I think a lot of the problems that are falling in your laps are your own problems of not managing correctly, and you have been one very willing to tell us where things must be improved. But I think part of the problem is a 1-year cycle for producing budgets for appropriations.

Could you comment? That is a question I did not tell you I was going to ask you, but could you comment on it if you have anything relevant?

Ms. GARVEY. And I may ask Mr. Basso if he would like to comment from the Department's perspective. But I would say certainly from a programmatic perspective, a multi-year predictable stream of funding is certainly something that we would find extraordinarily helpful to give us that kind of flexibility.

Mr. BASSO. Mr. Chairman, just speaking for myself as opposed to the Administration, I have had 35 years to observe this process, and one thing I am sure of is every year the cycle gets longer and more continuous. So I would have to agree with you, that having more time, more oversight, more deliberation, couldn't help but deal with a $1 trillion issue. And certainly I agree with you from my perspective on that.

Senator DOMENICI. Senator Gorton, did you get to ask questions?

Senator GORTON. No, I did not.

Senator DOMENICI. Please do so.

Senator GORTON. I have only a couple.

Ms. Garvey, what is the status of the Wide Area Augmentation System Program? And are the recent delays part of any larger structural challenge?

Ms. GARVEY. WAAS is definitely one of the most complex and most challenging projects we have. We did a series of testing, or actually, Raytheon, our contractor, did some testing for us in the fall and into the early winter months. Two issues or two elements, two factors arose. One is—and this is the good news—there is much greater accuracy with WAAS than we had anticipated. So the accuracy is even greater than what we had expected. That is the good news.

The part that is not so good is the whole issue of our safety monitoring, and it is very critical and very important for us to have the highest levels of safety as we are looking at this kind of equipment. We have no room for any mistakes in that area, so we have very high standards in the safety arena.

The testing is showing that WAAS is not able to meet those standards at this point, so we have that challenge for us. And, quite honestly, if it means a schedule slip or compromising the safety, we would obviously take the schedule slip. But we have scheduled next week, for 3 days, a technical review committee. It is made up of a contractor, FAA officials, and I was just mentioning to Mr. Mead earlier that we are inviting people from outside to help participate in this, to really identify a path for success here. How do we deal with this issue? How serious is it, and how do we deal with it? So we will have more to report on this after that group meets.

But good news on the accuracy. The safety standards, and it really involves the alarms going off more frequently than they should. We have to deal with that before we can move ahead.

Mr. MEAD. I would like to just say a word about WAAS from our work. As you know, we are independent of FAA. This is one of the programs that is having problems. This program started out with a program cost estimate of $893 million. We are now looking at about $3 billion.

This is also one of those programs experiencing schedule slippages. WAAS started out in 1996. In 1998 we were supposed to start deploying it now, it is going to be 2000 or later.

I have noticed some real improvements in FAA's oversight of the WAAS contractor here. This is one procurement where a lot of risk sharing is going to be needed because it is a very expensive contract. I think the contractor bears now a responsibility here, just like FAA.

WAAS is also a very important program in terms of technology development and in terms of transitioning to satellite navigation.

Senator GORTON. Thank you.

Another subject, Ms. Garvey. The recent contract with the controllers, is it affecting your ability to meet budgetary targets? Is it going to tighten your ability to do other things at a time of rather constrained budgets?

Ms. GARVEY. Well, thank you very much for asking that question. If you will bear with me—because this is an important issue to me. I think it—it is something I get asked very frequently.

First of all, we did have a 12 percent increase in our operations budget, but I think we need to say that there also was over 8 percent increase in mandatory spending. The controller contract is less than one-quarter of that, so I don't want to say it doesn't have an impact, but I also want to point out that it is a very small impact overall.

And I want to take a step back for a minute because we had some very important goals when we went into the controller contract negotiations. One was that we wanted to get some productivity gains. That was very critical to us. And I am happy to say that for the first time we have a contract that does include some cost savings and cost avoidance. We have never had that before. That is significant.

Second—and I think that some of the speakers earlier referred to this—we have not always had the best relationship with the controllers. Management and union have not been always in sync at the FAA. I think this contract has established an atmosphere for

us in the FAA where the labor-management relationship has never been better. They are full partners as we are moving ahead on modernization, absolutely full partners. And from my perspective, that is critical. We don't need to look far to see other places where the labor-management relationship is such that it really does sort of poison the well, if you will.

So we wanted productivity gains, and we wanted full buy-in for modernization. We wanted to take a look at some ways that we might be able to give up alternate work weeks and so forth. That is very tough for a 24-hour-a-day operation. We have been able to achieve those. And so I think it is extraordinarily positive.

We also wanted to be able to classify our facilities in different ways. We wanted to be able to say that San Francisco, Chicago, New York, those are very busy, and the controllers there ought to be paid in relationship to the number of operations that they had to control. So I think the contract is a solid, good document, and I think it will allow us to move ahead in a way that we probably could not but for a contract.

Senator GORTON. Thanks. Thank you, Mr. Chairman.

Ms. GARVEY. Thank you.

Senator DOMENICI. For your information, Senator, you were not present when the Inspector General put up a rather significant chart with three lines on it. One of them had to do with the increased costs attributable to the contract of employment versus the growth in other accounts because of it. I am not suggesting that the chart attempted to say we were harming one part because we have a good labor contract, but it did show that it is a very big part of expenditures that we are now online to keep giving for quite some time. If it works out that there is a much better relationship with employees and if it turns out to have added productivity, I think that would be exciting, and I congratulate you for it.

I have just two questions. I happened, just by coincidence, to have located in the city of Albuquerque one of your aging aircraft centers wherein the scientists at Sandia National Laboratory work with the private sector in determining the significance of aging on certain components of American conventional, ordinary airplanes that we have in our stockpile that we are using. I have asked them for some evaluations in the past. Clearly, even though we are building more new airplanes, we are also living on a stockpile of airplanes that are getting very old as people are flying around in rather old airplanes. And we need to know more about what that means.

Could you just talk to the record on that?

Ms. GARVEY. Senator, that is an absolutely significant issue. You are absolutely right that as our aircraft ages, that whole issue becomes even more paramount. We have worked very closely with the NTSB around the whole issue of aging aircraft, and we have a very aggressive program underway. Again, we have brought in some wonderful experts.

I am not as familiar with the Sandia Lab's efforts in this area. I am very familiar from my highway days of wonderful work that they have done, and I think it would be good for us to follow up and perhaps see if there is a way to include some of their information in what we are doing.

Senator DOMENICI. I believe there are two similar ones. I think there is one in the State of Iowa, if I am not mistaken. But, in any event, they are now pursuing some very exciting work on some of the very modern airplanes and testing just individual parts for their longevity, their strength. After 30 years, what is happening to them? And I think you have to be a big player in that.

Ms. GARVEY. Absolutely.

Senator DOMENICI. Because you have to tell the American people the planes are safe. It is not going to be so easy to keep doing that with planes that are growing older and older if you don't know the answer. Right?

Ms. GARVEY. Absolutely. An important issue for us.

[The information follows:]

Since the Aloha 737 accident in May 1988, the FAA has worked with the transport airplane manufacturers and airlines to improve the technology of inspecting for corrosion and fatigue damage, developed improved structural inspection requirements, and issued many airworthiness directives to correct aging problems on various types of aircraft. This continuous improvement in aging aircraft safety will be expanded by rulemaking that will require older airplanes to be evaluated, and monitored in service, for the development of any new sources of widespread fatigue damage (the type of damage that caused the Aloha accident).

The FAA continues to work aging aircraft problems through the Airworthiness Assurance Center of Excellence (AACE), through which Sandia National Laboratories plays a key role. In the AACE the FAA has set up a partnership that brings leading talent in government, academia, and industry to focus on maintaining the high level of safety in the aging fleet (along with other airworthiness problems).

At the Sandia National Laboratories, the FAA has set up an inspection system Validation Center. Sandia's group of samples with known flaws provides real aircraft structures to test new laboratory developed inspection methods. This provides the FAA with a way to ensure that newly proposed methods will meet their expected levels of performance in practice. This philosophy of validation is already working well in the area of airframe inspection. It has also been applied to engine inspection technologies, and will be used on the aging systems program that the FAA now has underway.

The research work at the AACE and, in particular at the Validation Center, is crucial to supporting the FAA's core capabilities and ensuring that the latest technology is correctly applied to maintaining the aging fleet.

Iowa State University is the co-leader with Ohio University of Airworthiness Assurance Center of Excellence and through their Center for Aviation Safety Reliability (CASR), they are working with the FAA's William J. Hughes Technical Center primarily on the development of new inspection methods for aircraft structures.

The effectiveness of the Center for Aviation Systems Reliability (CASR) and the Airworthiness Assurance NDT Validation Center (AANC) is intertwined with the certification, operational and maintenance requirements for aircraft structures. Nondestructive Inspection (NDI) technology has improved our ability to detect structural flaws and corrosion. The probability of detection establishes the inspection intervals for operators. Safe operation of aircraft beyond the design service goal is predicated on detection and modification of aircraft structure due to fatigue and corrosion. The real benefit of improved NDI is that of increased reliability of detecting flaws before the residual strength of the structure degrades to an unsafe level. We are able to extend the life of structures and repair or replace them within a safe time frame as a direct result of NDI advancements.

Senator DOMENICI. One of our Senators—I think Senator Conrad—made an issue of airplanes not being on time and the kind of problems people are having. I just want to clarify: Is that attributable to the fact that we don't have enough money, or is that attributable to something else?

Ms. GARVEY. Well, I would certainly say that—and let me step back for a minute. I think there were really three critical areas. Last summer we saw a 20 percent increase in delays, and there were, I think, three significant reasons for that. One is, as Don

McCarty said this morning, we all experienced some significant weather last year, and that was an issue. Second, the transition to modern equipment—we moved into DSR last year, and that created some problems for us as well. And, third, there were a number of significant runway projects that were taking place throughout the country that also had an impact, particularly at those critical centers.

I think the efforts that have been underway have been significant. We have been working closely with the airlines every single week in coming up with a Spring-Summer Plan for this year. We don't want to have the same repeat of what we experienced last year. We have come up with a very significant plan around procedures, around ways to manage the air traffic much differently, and that is going to be announced at the end of this year.

I can tell you some elements include giving our command center in Herndon more control—they know the whole system—and looking at a number of procedures as well. I will say that is the short-term fix. We still believe that the long-term fix is the long-term modernization efforts that we are also committed to. So that clearly is the long-term answer as we move forward.

Senator LAUTENBERG. If I might, Mr. Chairman, how about just the general increase in the flying public?

Ms. GARVEY. Absolutely.

Senator LAUTENBERG. Airplanes are filling and they are busy and slots are blocked and the gates are unavailable.

Ms. GARVEY. We are seeing that particularly at some of the hubs, as you know, at some of the airports near and dear to your heart, Senator. So we are seeing that as well, the growth in traffic.

Mr. MEAD. We don't have two things in this country pertaining to the delay issue that are very important, particularly as you are considering FAA's reauthorization. First, we do not have a common definition of what a delay is. Second, we do not analyze the causes of delays in a systematic way. This is irony of Shakespearean proportions, almost. Did you know that you are considered departing "on time" if that plane backs away from the gate within 15 minutes of its scheduled departure? But if you sit on that runway for 2 additional hours, even though you have pulled away, you are still leaving "on time".

Now, the person in that plane doesn't think they are leaving on time, but the Federal Government counts, and it shows up in USA Today and everywhere else as a departure on time. I think that ought to be changed.

Senator DOMENICI. Well, we thank you for that observation. I was wondering why they did that to us, why they didn't bring us back, since we were going to be there 2 hours, why they didn't turn us free. But obviously it would be a late departure.

Mr. MEAD. That is another issue.

Senator DOMENICI. It could be that is the reason they do it. They don't do it as much anymore, though, which is very interesting to me. Something has happened in the meantime. Planes are not pulling out as many times and them telling you as soon as you get away from the gate, well, we are going to be here for an hour before we take off. I haven't heard that as much lately. Have you?

Senator LAUTENBERG. Well, I got on an airplane the other day despite the precaution that said, look, we are going to get you on the airplane, we are going to close the door, but I can tell you now it is 55 minutes before we are going to be given clearance to take off. And it was excessive traffic going into the New York region.

So delays are alive and well, Mr. Chairman.

Senator DOMENICI. At least that one they told you clearly in advance, and I think they are doing a better job at that.

Senator LAUTENBERG. Yes.

Senator DOMENICI. I have no further questions. I guess I would like—do you want to go another round?

Senator LAUTENBERG. I haven't asked any questions.

Senator DOMENICI. Oh, I am sorry. I thought you asked them while I was gone. I am going to yield in one moment.

I wonder if you would mind, Administrator Garvey, responding to the last comments made by Mr. Mead with reference to the commonality that he suggested we don't have in some of these areas. Can you address that for the record?

Ms. GARVEY. Do you mean in terms of the delay issue?

Senator DOMENICI. Yes, where he just described the things that he recommended?

Ms. GARVEY. I think one of the issues that Mr. Mead has referred to is the common definition of delays and so forth.

Senator DOMENICI. Correct.

Ms. GARVEY. One very good and interesting result of the work that we are doing with the airlines right now, is we have sort of put some of that aside, and we have said, "Let us take a new look at this, and let us measure how the system is doing. Let us agree upon an established set of metrics." We have done that, and actually, they are pretty straightforward and pretty simple, and we now have sort of a common definition between the two of us.

We still have, as Mr. Mead suggested, the issue about DOT's definition of it. I think that is something we still need to work on, but we have agreed on the common definition with the airlines about how we are going to measure how well we do this summer, so we will be able to do that together.

Senator DOMENICI. Now, Madam Administrator, the Inspector General explained at length one of the major projects you have going, procurement contracts for new equipment, and I understand from my friends who know, that that is a very, very important new part of modernizing the system. He explained its original bid price and how much it ended up costing, and its original committed delivery date and how long it took. Now, I am not surprised. Believe it or not, we funded the Internal Revenue Service for new equipment for all America, only to find that they could not get it done If ever I was frustrated as an appropriator in those days was to say, "OK, we just put up $4 billion. We can now tell our citizens we are going to have a modern system at the IRS." IRS wondered for a few years why Congress defunded them in certain areas, and I can tell you it was because of what I just described. Now, thank God, it looks like that is over, but there are similar stories in Social Security and other areas, where there are big machines, and modernizing has been attempted in huge jumps, not just little incremental steps. But I guess it would be important to at least know,

since the subject came up, whether the FAA has analyzed this and if you know why that happened and can tell us that it will not happen again?

Ms. GARVEY. Mr. Chairman, I think the approach that we are taking on these big projects incrementally, step by step, is in large part the answer. I think that is absolutely critical as we are moving forward. Mr. Mead and I have talked a great deal about that, and I think that is a very positive step forward.

Second, I think that the whole issue of procurement reform, I want to stress again it has allowed us to make changes and made some differences to us. We are able to get contracts on board in 50 percent less time. The other—and Mr. Mead is absolutely right, there are about 5 projects at the FAA that are very big projects and need to be watched very carefully. He mentioned a couple, WAAS, STARS, OASIS and so forth. There are 5 of them.

But I also want to put that in perspective. We have a $2 billion budget in F&E. Those 5 projects make up about 15 percent, so there is still a large number of projects being done. And I think in those areas in particular, procurement reform has been beneficial. Having said that, I want to give you my absolute commitment that those 5 problem projects, if you will, are being watched very carefully. They are being managed differently with clear points of accountability. There are absolute deadlines that we have to meet, and we are doing that.

I think we need to do a better job in terms of procurement reform of building in life cycle cost, and that is something we have talked with Chairman Shelby's committee about as well. We need to bring that in, and that is one of the suggestions we have got, and we are doing that as well.

Senator DOMENICI. All right.

Ms. GARVEY. Thank you, Mr. Chairman.

Senator DOMENICI. Mr. Lautenberg, excuse me for not—assuming. I thought you might have——

Senator LAUTENBERG. Not at all. Our schedule has been mixed up, and I apologize for having to run off for a couple minutes.

Senator Shelby, do you want to——

Senator SHELBY. No, go ahead. I defer to you.

PREPARED STATEMENTS

Senator LAUTENBERG. Mr. Chairman, I have three statements that—one by Senator Hollings, one by Richard Durbin, one by Senator Johnson—that we would like to have inserted in the record.

Senator DOMENICI. They will be inserted and at this time, I would like to insert a statement from Senator Snowe.

Senator LAUTENBERG. Thank you.

[The statements follow:]

PREPARED STATEMENT OF SENATOR ERNEST F. HOLLINGS

Good morning and welcome to our distinguished guests, Administrator Garvey, Inspector General Mead and Mr. Crichton. I am very pleased that you are able to appear at this joint hearing before the Budget and Appropriations Committee. "Modernizing the Federal Aviation Administration: Challenges and Solutions" is the title of today's hearing, an apt and timely one at that. As many of you know, we have been conferencing on the FAA bill since fall and funding has lapsed on the Airport Improvement Program portion of the FAA's budget. Spring—the beginning

of the construction season is almost here and we seem to be headed no where soon on this issue.

We may pose theoretical questions concerning privatization and the role of government. What we cannot do, however, is dispute the duties incumbent upon us at this moment: properly funding the FAA so that it can carry out its primary mission of ensuring safety, and properly funding our Nation's aviation infrastructure. Few will dispute the role of transportation in commerce. Admittedly, shipping and rail initially were responsible for building our Nation's wealth and shaping its cities; however, with the past century, aviation has become the primary and most important means for moving people. In fact, it has revolutionized the way we do business. In 1998, U.S. air carriers enplaned 607 million passengers. According to the FAA, this number will grow to an estimated 1 billion passengers in 2010. This explosive growth does not even include cargo flights.

Congestion in the skies and on the ground at our Nation's airports is also increasing exponentially. According to the Air Transport Association, delays were up by 36 percent this summer. The prediction of gridlock as was noted in the National Civil Aviation Review Commission's 1997 Report seemed to be coming to early fruition. While it is fortunate that we have Canada's system as an example of privatized air traffic control, the United States' airspace has dramatically more complicated flight paths, in addtion to a more diverse body of users. Deregulation of the airlines industry left many winners and losers. We have planes flying all over the place, including a large number that are classified as general aviation. Our population is greater and extends throughout our borders. We have 86 commercial air carriers compared to Canada's one. And with the exception of a few, the majority of U.S. carrier operations use the hub and spoke system, allowing them to serve a larger number of passengers. We can not afford to have another set of winners and losers by turning air traffic control over to the private sector.

Although it is important that we engage in discussion on ways to facilitate modernization of the FAA, it is imperative we do not trade academic discussions for action. We must step up to the plate and do our duty—pass the FAA bill.

PREPARED STATEMENT OF SENATOR RICHARD J. DURBIN

Chairmen Domenici and Shelby, thank you for calling this important hearing on Federal Aviation Administration (FAA) modernization. Obviously, the State of Illinois, home to one the world's busiest airports, has a great interest in achieving the most efficient and safest air traffic control system possible. I thank Administrator Garvey for joining us today.

I also want to mention my strong desire to see the conferees on the FAA Reauthorization Bill finish their work as soon as possible. In downstate Illinois, we're facing an air service crisis. The High Density Rule at Chicago's O'Hare International Airport is jeopardizing service to smaller communities. It is my hope that the conference report will bring some relief to these communities who desperately need access to the Chicago market for economic development and tourism.

I'd like to use my time this morning to talk about an important, commonsense safety and accident prevention issue—video cameras in airplane cockpits.

The tragic and mysterious crash of EgyptAir 990 in November and the recent crashes of Kenya Airways and Alaska Airlines give us a solemn reminder that air travel can never be made too safe. As crash investigators attempt to sort out the circumstances surrounding these accidents, the Federal Government continues to look for new and innovative ways to enhance air safety and prevent future accidents.

Cockpit voice recorders help us understand the causes of many crashes. But sometimes they still leave us mystified. I believe the missing link to a clearer and fuller understanding of why airplanes crash is video camera technology in the cockpits and on planes.

In an era where video cameras are commonplace in grocery stores, office buildings, public buses, and at ATMs, it is time to modernize the tools of air safety. The voice recorder was once state of the art, and it still can be an important tool for investigating accidents. However, a video camera could provide invaluable information for analyzing accidents and creating a safer environment for airline passengers. Visual recordings could also shorten the length of an investigation at a time when the public is anxious and eager to understand what happened.

The crash of EgyptAir flight 990 unfortunately illustrates the need to improve flight recording devices. Although the audio record provided the National Transportation Safety Board (NTSB) with some important clues about what might have occurred just before the crash, the recording appears to raise many more questions

than it answers. Visual recording equipment could provide more practical information in such circumstances.

I understand the concerns raised by the opponents. Video recordings should and must be treated in the same manner as cockpit voice recordings. Privacy concerns and compassion for victims' families must be appropriately addressed.

This week, I met with the chairmen of both American and United Airlines. They're open to the concept. I've had the opportunity to meet with and raise this subject with today's witness, FAA Administrator Garvey, and with NTSB Chairman Jim Hall. Both are interested.

In fact, Chairman Hall wrote, "The Safety Board shares your belief that a video recording could provide invaluable information for analyzing accidents and creating a safer environment for airline passengers." NTSB's Office of Research and Engineering is currently looking into this matter.

Mr. Chairman, the Federal Government, specifically the FAA, must lead the way. I am asking Administrator Garvey to continue to push the agency to consider this concept and the latest available technology.

However, Congress has a role as well. We should ensure that both the FAA and NTSB Reauthorization Bills include language that prepares the way for the possibility of video cameras and recordings. We should not wait for another accident.

I thank the Budget Committee and the Transportation Appropriations Subcommittee for holding this important hearing. I look forward to working with my colleagues as well as with the FAA and NTSB to advance this commonsense concept.

Thank you.

PREPARED STATEMENT OF SENATOR TIM JOHNSON

Thank you, Mr. Chairman. I appreciate your holding this hearing and thank the witnesses for being here this morning. I want to take a moment to express my concerns regarding the status of the Federal Aviation Administration (FAA) reauthorization. As we all know, the authorization lapsed last fall and consequently, our airports currently are operating with some uncertainty about the future.

Several of South Dakota's airports receive funding through the Airport Improvement Program (AIP), which funds a variety of critical projects across the country including safety, security, capacity, and noise projects. In recent years, AIP funds were used for a number of important projects, including the rehabilitation and lighting of a runway in Pierre and runway rehabilitation projects in Watertown, Sioux Falls, Rapid City, Mitchell, Huron, Brookings, Aberdeen, Redfield, Flandreau, Custer County, and Platte. Many critically important projects are slated for construction when the funds are made available and I hope that a resolution to the conference is found in a timely manner so that our entire construction season, which is often fairly short because of the harsh midwestern winters, can be utilized.

Essential Air Service (EAS) also is a critical program for South Dakota. Yankton's airport depends on EAS for air transportation, and the cities of Brookings and Mitchell also are served by this program. EAS has proved to be crucial to ensuring that rural America remains economically viable, by allowing scheduled air service to exist at many rural airports across the Nation that otherwise could not support commercial air service. If funding for EAS lapses, South Dakota's rural airports, and the communities they serve, will be adversely affected.

Finally, regarding the controversial issue of how to best ensure airports receive adequate, reliable funding in the future, I support using all revenues generated by aviation taxes for aviation needs. Using all aviation trust fund monies to meet the unmet needs in our aviation infrastructure and the growing needs of the flying public makes common sense. I want to commend Chairman Domenici for attempting to find a compromise on the complex issue of aviation funding. I hope that the conference can resolve this complex issue as soon as possible, and, again, I appreciate the Chairman's efforts to find a compromise.

I hope the FAA reauthorization conference will be able to resolve the extremely complex and critically important issues involved in the FAA reauthorization conference so that our airport managers will no longer be held hostage by congressional inaction. Thank you, Mr. Chairman.

PREPARED STATEMENT OF SENATOR OLYMPIA J. SNOWE

Thank you, Mr. Chairman. I would like to express my appreciation to you for scheduling this hearing. This is a very important issue.

As a member of the Senate Commerce Committee and Aviation Subcommittee, which has jurisdiction over the Federal Aviation Administration, I recognize the extraordinary importance of the FAA reform and modernization issue.

Just last month, a relatively minor computer glitch in the Air Traffic Control System virtually halted air travel in the East. This past summer, flight delays were at an all time high. This is our wake-up call. Modernization is critical. After all, by some estimates, air traffic congestion is expected to grow by upwards of 50 percent through 2008. I do not believe that we are currently prepared to handle growth of this magnitude.

Of course, some of the problems in the Air Traffic System are caused by factors beyond our control, such as weather. However, other factors, including over-scheduling, antiquated technology, and bureaucratic management can and must be addressed.

To this end, the FAA has in recent decades developed modernization initiatives to improve its programs and upgrade its systems. However, these efforts have been plagued by chronic cost and schedule overruns, due at least in part to what many believe was an overly ambitious strategy. The GAO, for example, identified the FAA's failure to follow a "phased" versus an "incremental" approach to modernization. While the FAA has taken steps to address some of these criticisms—adopting short- and long-term modernization goals and working toward those goals through incremental change, for example—I am not sure that all of the outstanding issues have been addressed.

A key issue, of course, is air traffic control modernization. The FAA has outlined three components to its air traffic control modernization strategy: (1) maintaining current systems and upgrading infrastructure; (2) enhancing safety; and (3) developing new mechanisms to increase capacity and efficiency in the system.

These are fundamental themes, and I strongly believe that we need to focus our attention and follow through before its too late. I look forward to what I hope will be a frank and constructive exchange of ideas on how to confront the FAA's challenges through adoption of new technologies, better management practices, and perhaps restructuring.

I am interested in hearing from the FAA on what the costs and long-term outlook for modernization are, what efforts the agency has made to counter criticism from the GAO and others, and what affect all of these changes will have on consumers.

The FAA certainly faces enormous challenges as it attempts to keep pace with the rapid changes taking place in aviation.

Once again, I would like to express my appreciation to the Chairman and my thanks to the witnesses for sharing their insights.

Thank you, Mr. Chairman.

Senator LAUTENBERG. Ms. Garvey, one of the things that I was kind of curious about, and including the discussion—included in the discussion of delays was some concern about the lack of clear definition what constitutes delays, and I think that would be very helpful to the passenger market, because they just do not get it. They know when they are late, and they know what the OAG or they were told when they called to make their reservation, and if it is not there, it is late. It does not need more defining than that. But how much—and you have identified weather as a significant factor. We ought to be able to identify how much delays cost by weather, and I think that would be a good thing to do. It does not mean we can throw up our hands and ignore it. The fact of the matter is there is better and better weather equipment out there. We do not want airplanes flying in risky conditions, but if the public knew that, they would say, "Boy, that is a good idea that they delayed that."

You were talking about procurement, and you know, Senator Hatfield and I and others worked hard at getting the procurement process reform, and yet, things are not in place, and you had a discussion just now, Senator Domenici, and are there any legal obstacles there that you have, any regulatory problems that you have in implementing the procurement process as we like to see it?

Ms. GARVEY. Senator, I am not aware of any, and again, I actually think we have made some very good progress in it. The recent review that we had by Booz-Allen—it was an independent review—made 18 suggestions to us, including, by the way, getting the life cycle costing included. They essentially said, "Look, you are on track. You are doing the right stuff."

Senator LAUTENBERG. Well, I think our friend, Ken Mead, may differ with you a little bit on that.

Ms. GARVEY. I am not sure.

Senator LAUTENBERG. Is there a difference in view?

Mr. MEAD. No; I was musing that in our observations of procurement reform, it is interesting that people sometimes do not know what to do with freedom when they get it. When Congress gave FAA freedom, there was a period of time, it seems to me—I was at GAO for part of this time—now being at the Department where the agency did not know what to do with this newfound freedom. FAA is still struggling with it to this day. I hear from Mr. Belger and others about this but I see improvements on the innovations. I really do. I am not sure FAA really believed it when they had freedom from Federal acquisition and personnel rules.

Ms. GARVEY. If I could just mention I was at Highways then. And I do not want to leave the impression that there is not more we can do. I think we have to constantly ask ourselves: are we using it as flexibly as we can, and can we push the envelope a little bit more? So we need to constantly do that. Mr. Mead's staff is terrific about working with us and making some suggestions. I think for the most part we have implemented just about all of those or well on the way to.

Senator LAUTENBERG. Well, some aviation observers have complained that the Appropriations Committee has not granted FAA enough procurement funding. Now, my experience has been that when the Appropriations Committee reduces funding for a particular procurement, it is based on FAA's testimony indicating that a project has been delayed or is otherwise put on a different track. Do you believe that granting FAA an unlimited pot of procurement funds is going to put an end to your contracting problems in a hurry?

Ms. GARVEY. I would agree with the statements that were made earlier. I do not think money is the only answer. I will say that I think this year in 2000 we have had some real shortfalls. We are looking at some programs that may be slowed up a bit, but I would certainly agree with the earlier comments, it is not the only answer. I hope we can get what the President asked for this year, but——

Senator LAUTENBERG. Is any part of the problem inability for suppliers to deliver product, whether it be software, hardware, otherwise?

Ms. GARVEY. That is a very good question. I am not sure I know the answer to that. I am not aware of any, but I will check with people. There may be some cases where that is an issue. I will tell you one area I have been a little concerned about. The kind of freedom we have had and flexibility we have had has created some problems for some small businesses, and that is an issue we have been wrestling with lately, whether or not our sort of eagerness to

get some contracts out, whether we may have inadvertently not been quite as fair to some of the small businesses as we should be. So that is something we are looking carefully at and dealing with as well.

[The information follows:]

No. We are not aware of any inability on the part of our supplier to deliver products.

Mr. MEAD. I recall, Mr. Lautenberg, you were on the committee at the time and saw firsthand what happened to the Advance Automation System. AAS was the centerpiece of FAA's air traffic control effort in the late 1980's and early 1990's. And I recall in appropriations hearings that year that FAA came up and asked you for money. Actually, I think the committee largely funded that request, only to have, the plug pulled on the entire program 11 months later as a result of an intensive study by Deputy Administrator Daschle and Administrator Hinson. And going back further to the Microwave Landing System, which was a multi-billion dollar program, which was also terminated. The Micro Wave Landing System was terminated because of pressure from the airline industry.

Senator LAUTENBERG. Well, it is interesting, because, Ms. Garvey, you have the unique experience of serving both as a Deputy Highway Administrator as well as the FAA Administrator. And in the procurement process I saw something unique happen in New Jersey last year. When we gave a contract for a major interchange—perhaps you remember, major 417—and I think Secretary Basso was there to celebrate the completion a year early, a year early, and essentially under budget for the work that was done, because we gave a contract out there, we gave the contractor a lot of headway, and there was a bonus promise, and the bonus promise that we had to pay—I think it was about $3 million—was insignificant compared to the pre–Christmas rush that was taking place on these highways and a lot of retail shopping. And I think we begin to learn things, and I have seen it also on a light-rail system that is being now done in New Jersey, in North Jersey, where the contract is fairly open-ended—not without all the audit trails that one would expect—but the fact of the matter is that if we kind of got out of the way, we found out that if we had reliable contractors, we could get the job done, and there is a tendency among all of us here to micro-manage at times, because we get frustrated at the lack of completion of things.

Now, do you think that our interstate highway system provides the kind of benefits to our economy that perhaps investments in FAA might provide? Is it appropriate for FAA to get guaranteed amounts of general funding when the Federal Highway Administration receives no general funding whatsoever? The point I make, I assume, is obvious at this juncture, and that is, what about this concept of assuring FAA that it gets whatever funds it needs, and jeopardizing investments in highway or rail or other parts of the transportation system, or accounts way beyond that?

Ms. GARVEY. This is where I turn over to Dr. Basso.

Dr. BASSO. Senator, it is a very good question. First just briefly on the Interstate Highway System, I think it has been unprecedented what the system has done for the country, and in par-

ticular, I enjoyed being with you in New Jersey a few weeks ago when we had a chance to see all of that firsthand, very important.

On the question of guaranteed funding, I think clearly the Administration has not called for guaranteed general funding for the FAA. The other point that I think I should make is that clearly the trust fund alone, with the receipts that are coming in now, do not or would not just simply meet our budget needs, and when I am able to talk more about this on Monday, I can be more specific about our approaches to how we would meet those needs.

Senator LAUTENBERG. Mr. Mead, your testimony includes some sobering data regarding the cost growth and three of FAA's major procurements. Do you think that there is a risk that dramatically increased appropriations to the FAA Facilities and Equipment budget will cause the cost of these programs to grow even more? Does it suggest that it will increase the appetite for spending with some less control involved?

Mr. MEAD. If the Congress is going to give FAA more money, I would suggest that you put in some controls to ensure that additional funds are not absorbed by salaries and related expenses and cost growth. I think we would all come away from the table a bit disappointed if additional funds intended for modernization went to cover cost growth in other areas.

I do think that in tandem with the FAA reauthorization and appropriation process, there should be a very explicit linkage to a cost accounting system. If someone comes and asks you or me for money, you probably like to say, "Well, what exactly would you use it for and what will you get out of it?" To arrive at the answers to those questions, you need a cost accounting system. Most businesses have them. While it is fairly unusual in the Federal Government, businesses have them, FAA, in many respects, is a 365 day a year business. And we are talking about a lot of money. So I think there are investment opportunities—I can rattle off a whole list of them—but it would be very important that the money be spent wisely.

Senator LAUTENBERG. What do you think, Ms. Garvey?

Ms. GARVEY. Well, first of all, I could not agree more on the cost accounting system. In fact, I think that holds, as I mentioned, the most promise for helping us control our costs, because we have accounting like every government agency right now, but it is not to the level that we need it. It is not in the same way that business has it.

Senator LAUTENBERG. But inhibits the development or the influence——

Ms. GARVEY. We actually are well on the way. I will tell you that this year we did—and Mr. Mead referred to that—we did delay implementation for everything other than the Air Traffic Control System, and that was because of the budget constraints. We worked very hard though to make sure that the air traffic control piece, which is in our view the most critical piece, that we are on track with that. We have a framework in place. We are already beginning to collect data for both the en route and the oceanic domains. The flight services stations will be later this year. So we are beginning to collect that data now. We have tested with industry. That is, are we headed in the right direction? We have got extraor-

dinarily complimentary comments from industry. One representative from American Airlines said that it ought to be a model to be used internationally. It is that level of detail. So do I wish it were in place today? Absolutely. But are we on the right track? Yes, we are, and I think it holds great promise for us.

Senator LAUTENBERG. Thank you.

Mr. Chairman, I think it is fair to say that the thinking necessary to correct some of the problem there is in place, so we encourage you to move forward with these changes, and speak emphatically about them when you meet with the committees of the Congress, and make sure that they understand where you are going and what the mission is.

Thank you very much.

Senator DOMENICI. Thank you, Senator.

Senator Shelby.

Senator SHELBY. Thank you.

Ms. Garvey, you have been at the FAA long enough now to have a pretty good sense of the challenges that have to be addressed to make that organization more efficient, more accountable and responsive to its customers. I believe you received good marks from insiders at the FAA, from most industry experts, and generally a good reception here on the Hill, including from my committee.

Ms. GARVEY. Thank you.

Senator SHELBY. Some claim that you are the best administrator that the agency has ever had. Yet, the FAA of 2000 has many, if not all of the problems I mentioned earlier, that have plagued it for the past 20 years.

Basically, is this too big a job for any one person? Is the air traffic control function a task that would be better executed by nongovernmental management structure, or are all the naysayers out there predicting gridlock and doom wrong?

Ms. GARVEY. Well, thank you first of all for the kind comments.

I will tell you, by the way, that I am reaching my midpoint of the 5-year term tomorrow.

Senator SHELBY. Congratulations.

Ms. GARVEY. Thank you, thank you. And I expect to see it through.

I think the whole issue about whether or not there ought to be a different structure is absolutely the right kind of debate to have in this Congress, absolutely the right kind of debate. The Administration has proposed, as we know, in 1995, a corporation, a performance-based organization, but there are lots of ideas out there, and to have them debated is appropriate. But I do want to say—and I hope you will bear with me—but I really do think we have made some progress. It is difficult to change a 47,000-people agency, but I think we have made some enormous strides forward. I really do not want to go home today without saying that I think the work that is being done at the FAA and the kind of decisions that people make on a daily basis have not produced some positive changes in the last 2 years. We are doing things differently, and I think we are getting some very significant work done.

Senator SHELBY. BNA reported just this morning that the President's budget request for FAA operations is $6.6 billion. That is in excess of what is currently being contemplated in the FAA reau-

thorization conference. Is that correct? And if that is correct, is the reauthorization inadequate or is the President's budget request bloated?

Mr. BASSO. Mr. Chairman, let me just answer by saying I am not in a position to confirm the number today. I will be on Monday and——

Senator SHELBY. Are the numbers in the ball park?

Mr. BASSO. They are clearly in the ball park, Mr. Chairman.

Senator SHELBY. Good.

Mr. BASSO. I think I have to give you that, and I would like to promptly on Monday advise you——

Senator SHELBY. Will you get back with us on that?

Mr. BASSO. Sir?

Senator SHELBY. Will you get back with us on that?

Mr. BASSO. Absolutely. I will call you Monday morning first thing.

Senator SHELBY. What is the status of the contract tower plan that Congress has requested the FAA? Ken, do you want to comment on that?

Mr. MEAD. I think there is kind of an odd issue that has come up on this Contract Tower Program. We have reviewed it. We found that these low-level towers, the program was essentially sound for low-level towers. We did find that FAA has to stay on top of the contractors to make sure that they come through and live up to their staffing obligations. Safety did not seem to be affected.

Now, your committee, the House, the Conference Committee, directed FAA to do a study of whether that Contract Tower Program could be expanded to further towers. FAA's study was not done properly, in my view. And you turned around and directed us to do it, in the Inspector General's Office. We are in the process of doing it.

One issue that has come up is that the controller agreement establishes 15,000 controllers, either as a ceiling or a floor or both. We were told that, "Well, if FAA were to contract out any more towers, that is, privatize them, well then, you would be abrogating the controller agreement because some of the controllers would have to come from these towers." I am not so sure that that is a correct analysis, because those controllers could go to some other tower, or they could leave. FAA could hire more controllers and put them where they are needed most—at the busier facilities. This is a very controversial issue.

I think that Contract Tower Program at low-level facilities, where they are not getting a lot of traffic, is a sound program, and deserves support.

Senator SHELBY. Mr. Mead, would you be concerned that the necessary FAA reform would be less likely if an aviation firewall was erected?

Mr. MEAD. I do not see the issue as a firewall, and with all respect.

Senator SHELBY. What do you see as being the issue?

Mr. MEAD. Because if you gave FAA all the money that comes in every year from the trust fund, they would be getting less money now than you have appropriated. I think they would get about

$700 million less, unless you took all the interest. So I think the real issue here is whether general income taxes from the general fund ought to be going to FAA as an entitlement. I know that is a policy judgment for the Congress. Over the years I think that the appropriators have done a good job at exercising oversight, I cannot point to a lack of money as being the problem with major systems that have had problems. But again, I know there are additional investment opportunities out there.

Senator SHELBY. Your statement indicated that in 1995 the GAO and the Office of Inspector General cautioned that neither procurement or personnel rules, nor lack of funding were the source of the problems the FAA was experiencing with this ATC modernization. Is that still true?

Mr. MEAD. Yes, it is largely still true, sir.

Senator SHELBY. OK. Your statement also indicates that the FAA originally planned its cost accounting system to be fully implemented by October the 1st, 1998, but that the FAA has yet to implement this system. Why is a cost accounting system so critical to the effective management of the agency and for making responsible modernization decisions? Should the FAA request supplemental funding or reprogramming to complete the development and implementation of a cost accounting system?

Mr. MEAD. Part one of your question, a cost accounting system is important, because it tells you how much you are spending for what——

Senator SHELBY. It is accountability, is it not?

Mr. MEAD. As its name would suggest, yes, sir.

Senator SHELBY. Accountability.

Mr. MEAD. And if you do not have one, and you get more and more money, what is the real incentive for having a cost accounting system?

Senator SHELBY. I agree with you.

Mr. MEAD. So I think—as Ms. Garvey was saying, you have to keep the accelerator to the floor on that.

And as to your second part of your question, FAA has a roughly $10 billion a year budget, and it is difficult for me to believe that out of that large sum of money the extra $2 million that would be required to do something that is so fundamental, that even a company in bankruptcy must have, that FAA could find that money. Now, maybe they do need the supplemental, but I do think it is very important for work on a cost accounting system to go on.

Senator SHELBY. Thank you, Mr. Chairman.

Senator DOMENICI. All right. If there are any other questions, Senators can submit them, and we would ask you to answer the questions as quickly as you can, because we are on about a 2½ week deadline.

Before you leave, Madam Administrator, I wanted to compliment you on your personal hiring practices. A year ago your director of the budget was sitting there behind you——

Ms. GARVEY. Wonderful job.

Senator DOMENICI. Mr. Riley was sitting back here giving us advice, and you actually found somebody very, very good. We are very sorry that we lost him, but it is your gain and obviously our loss.

Ms. GARVEY. It is our gain.

ADDITIONAL COMMITTEE QUESTIONS

Senator DOMENICI. And we wish him well as he attempts to help you do your job.

Ms. GARVEY. Thank you very much.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO MS. GARVEY

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

TECHNOLOGY AND FUTURE OF AVIATION

Question. The world is changing. Technological advances have transformed our lives and provided benefits to the aviation community. Does the current structure of FAA allow it to fully harness technological advances and adequately respond to changes?

Answer. As the experience of the private sector shows, there is no one best structure to advance technology and respond to technological change. The FAA has had good success in breaking up large, technically challenging changes into manageable pieces so as to "build a little, test a little, change a little" in what is called spiral development. This is the approach for Free Flight Phase 1 (FFP1). We are partnering with the airlines and the Europeans on development of data link. Through our involvement with the International Civil Aviation Organization and RTCA Incorporated, formerly Radio Technical Commission for Aeronautics, and in partnership with our aviation industry, we are setting standards for use of new technology. In our Safe Flight 21 initiative, the FAA and the aviation community are developing the aircraft avionics for the future. The FAA has placed a heavy emphasis in its acquisitions to buy commercial off-the-shelf products, shifting the risk for development to industry. This causes the FAA to plan and implement technological refresh cycles with our systems with greater frequency than in the past.

While development is on the cutting edge, implementation takes more time, The National Airspace System (NAS) must evolve, not change in a revolutionary way. The users must have time to transition and make their capital investments. The transition must be safe, and we must have experience with the new technology before we phase out the old. This contributes to increased operations and maintenance costs that are not seen in other industry segments when they retool or replace automation with much shorter life cycles.

FAA'S MODERNIZATION PROGRAM

Question. In the early 1980's the Administration began a modernization program to upgrade the antiquated Air Traffic Control System. Historically modernization projects have experienced significant cost over-runs and schedule delays. What mistakes were made during FAA's modernization efforts of the past? How have these lessons been applied to today and future efforts?

Answer. The FAA has learned that large projects must be broken down into manageable implementation steps. We have demonstrated this with FFP1 and spiral development. Each step must produce measurable benefits, either to the users or the FAA or both.

Data link has been broken down into a series of discrete steps and the airlines are participating in early phases of development and implementation. We have started with four common message sets. We will expand to 18, and then add additional messages based on joint data link trials that are underway with Eurocontrol.

We must adequately sustain our current infrastructure while we continue to modernize. To jump start modernization and to reach consensus that formed the basis of FFP1, we had to make a number of investments at the expense of our infrastructure. This was necessary to reach consensus on modernization and formed the basis of FFP1. We are now increasing our investments in critical infrastructure to produce a more balanced portfolio. This investment includes funding power system upgrades, facility improvements, communications improvements, physical security, and information security.

Close collaboration with our user community is essential. We must do better mid-range (3 to 5 years) planning for modernization. We value our continuing collaboration with the users on the NAS architecture. We have been dealing with urgent

problems first. Priorities such as Year 2000 fixes and increased security at our Nation's airports ($100 million per year) have drawn funding away from modernization activities.

Question. What management reforms have been instituted within the FAA to prevent FAA's current modernization efforts from being over budget and delayed? Are there other actions you are now considering?

Answer. The FAA initiated several different reform efforts aimed at improving the operational environment within the Agency and programmatic performance.

Performance plans are linked to specific modernization goals and monitored on a quarterly basis. The FAA took an important step in support of culture change and improved performance by developing annual outcome-based, mission-focused performance goals and indicators in line of business performance plans.

The Integrated Product Development System establishes cross-functional teams throughout each FAA line of business to produce effective and efficient products and services that satisfy customer/user needs.

The FAA Integrated Capability Maturity Model integrates a unified approach for evaluating FAA's processes and improving them. Early in the implementation process, we expect results to contribute to increased efficiency and higher quality products and services.

The requirement process re-engineered and established a single organizational entity to better manage system requirements and ensure improved collaboration with the teams.

Acquisition reform established corporate-level decision making for FAA needs and investments and substantially streamlined procurement processes. It created an improved structure and process for defining FAA needs and investments.

The portfolio management aggregates investment candidates into funding categories to facilitate managing the capital investment portfolio as a whole. It increases benefits and helps manage risks.

Two examples of programmatic success working within this changing operational environment include the Display System Replacement (DSR) and the Host and Oceanic Computer System Replacement (HOCSR) Programs. These two programs successfully delivered their products within their acquisition program baselines. Among some of the benefits they derived from reform initiatives were:

—Stable requirements.
—Hiring new personnel faster.
—Attracting new staff using the new flexible compensation system.
—Using cross-functional team concepts to improve teamwork and communications.
—Using Acquisition Management System (AMS) to talk with industry more openly, involve industry in their acquisition process, and engage in teaming with industry.

Question. What are your goals and vision for FAA modernization over the next 5 to 10 years?

Answer. Two documents used to describe the FAA's vision for NAS modernization, both long and short term, are the NAS Architecture and the Capital Investment Plan (CIP).

The NAS Architecture, released in January 1999, is the United States aviation community's comprehensive, long-term plan for improving the NAS. The NAS Architecture is based on the joint FAA and industry operational concept for planning and conducting flight operations. Our shared goal is to increase safety, security, and efficiency of the NAS.

The CIP is an overview of FAA's NAS Architecture. It summarizes the FAA's capital resource expenditure plans for fiscal year 2001 through fiscal year 2005 and is based on the Office of Management and Budget's 5-year estimates. The plan shows the extent to which the Agency expects to modernize for the next 5 years. Our modernization goals are described as follows:

—Upgrade our infrastructure to add new safety and security capabilities, and to add new efficiency capabilities. System outages have the potential to erase the benefits derived from new capabilities as evidenced by our recent outage at Leesburg Air Route Traffic Control Center.
—In addition to new capabilities, we must continuously improve the services we provide to the Nation. We must also expand on how we deliver these services to gain user benefits. Benefits are realized through increased safety, delay reduction, improved access to the airspace by all users, increased predictability in delivery of our services, improved flexibility to the users in planning and flying through the NAS; and more return on investment to gain efficiency.
—Assuming funding levels close to the President's budget and outyear projections, over the next 5 years, we can accomplish many of the modernization activities

that will improve the safety, security, and efficiency of the NAS. Some of these are as follows:

—Be well on our way to the implementation of satellite navigation;
—FFP1 will have been completed in fiscal year 2002 and by fiscal year 2005 these automation tools will have expanded to other locations in the NAS;
—Additional surface movement radars will have been deployed at airports having high numbers of runway incursions starting with contract award this year;
—Initial controller-pilot data link services will commence in fiscal year 2003 and be expanded to a larger message set by fiscal year 2005;
—Most terminal radars and secondary surveillance beacons will be replaced by fiscal year 2005;
—Modernized oceanic services will begin operations in fiscal year 2002 and be fully updated by fiscal year 2006;
—Critical en route infrastructure (Direct Access Radar Channel/DARC and Peripheral Adapter Module Replacement Item/PAMRI) will be replaced by fiscal year 2004 and after a significant development investment, the en route software will be replaced by fiscal year 2007;
—We have turned the corner with Standard Terminal Automation Replacement System (STARS);
—We will have approximately one-half of all terminal facilities deployed and operational by fiscal year 2005; and
—Our infrastructure investments in power systems and facility upgrades will keep pace with service demands to reduce outage related delay.

RECENT AIR TRAFFIC CONTROL OUTAGES

Question. On January 6, FAA's air traffic control equipment at the Leesburg, VA, location failed, causing hundreds of flights all over the East Coast to be delayed. On December 19, 1999, the primary FAA radar system in Palm Springs, CA was declared unusable. Please describe the recent outages of air traffic control equipment in Leesburg and Palm Springs. What caused these outages?

Answer. The daily certification of the HOST System was performed at Washington Center in Leesburg. A manual refresh of the HOST System was initiated; however, the refresh interrupted the computer processing and created the subsequent outage. The HOST Computer Program remained locked up and extended the outage. The flight plan table overloaded and service degraded on January 6, 2000. Washington Center transitioned to an independent backup system and resumed normal operations.

The radar at Palm Springs, CA was declared unusable on December 19, 1999 due to equipment deterioration and environmental conditions. FAA provided interim service using military radar. Airway Facilities optimized the Palm Springs radar performance and replaced the Air Traffic Control Beacon Interrogator (ATCBI)–4 with an ATCBI–5. Information from the ATCBI–5 and surveillance radar is now fed directly into the terminal radar. Normal operations resumed at the Palm Springs radar on February 21, 2000.

Question. How quickly were the problems fixed?

Answer. At Washington Center, normal operations resumed after 3 hours and 34 minutes, At Palm Springs, Airways Facilities used 80 hours to optimize performance of the radar.

Question. How are you ensuring that this will not occur in the future?

Answer. A software fix was developed and installed at Washington Center to prevent this problem from recurring. The software fix is being distributed to all en route centers.

At Palm Springs, the installed systems have been optimized and are operating within design parameters. The FAA will continue to review the complex local environmental issues at Palm Springs. These include unusual atmospheric conditions, local topography, and a number of electricity-generating windmills that create a unique environment. An Airport Surveillance Radar-11 is scheduled for installation in fiscal year 2005. The FAA is developing a transition plan to further improve radar service at Palm Springs.

Question. Do you agree with the statement that additional funding or enactment of a specific bill would have prevented this?

Answer. No; outages occur for a variety of reasons. Additional funding would neither prevent these events from occurring nor can the events be tied to insufficient funding.

RESULTS OF PERSONNEL AND PROCUREMENT REFORMS

Question. In 1996, Congress provided FAA the ability to develop and implement acquisition and personnel reforms to address the unique demand on, as well as the needs of, the agency. What flexibility did these reforms provide the FAA?

Answer. Acquisition and personnel reform have been very beneficial to the FAA. Under personnel reform, we have designed and implemented a new human resource system. Initial efforts focused on "quick hit" changes to policies and processes such as delegating authority for personnel decisions to line organizations and managers, and offering additional flexibility in filling positions. We have developed a comprehensive compensation framework, which establishes the overall objectives and tenets of FAA's compensation programs. We have designed an evaluation plan to assess progress in meeting the objectives of personnel reform, and we have developed proposals for more comprehensive long-term program changes. These improvements represent the first steps in moving from decades-old personnel programs to a new system.

Acquisition reform has provided the FAA the following:

—Flexible policy and guidance;
—Reasonable competition among two or more sources is the preferred method of source selection;
—Single source method is still an option when it makes good business sense to do so;
—Best value method is used as the basis of award for most contracts;
—Any method of cost or price analysis may be used to determine fair and reasonable prices with price analysis being the preferred method for evaluating competitive proposals;
—Policy does not require Cost Accounting Standards on contracts for commercial items;
—Protests and disputes are decided within FAA's Office of Dispute Resolution;
—The Administrator has final decision authority; and
—Direct access to the small business community, i.e., the Small Business Administration is not involved in the contracting process.

Question. It has been 4 years since Congress passed the provision. What tangible results has the FAA achieved directly related to these reforms?

Answer. *Personnel Reform.*—Since 1996, FAA has made many improvements that represent the first steps in moving from the decades-old personnel program to a new system. Reform has enabled us to accomplish the following:

—Reduce the time it takes to fill positions and effect personnel actions. The average time to hire a new employee has been cut from 6 months to 6 weeks.
—Establish an automated system that reduces the time to classify a position from a previous average of three weeks to a current average of 1 day.
—Streamline establishment and recruitment for senior leadership position (e.g., hired 70 executives, 17 percent of whom came from outside of government; hired 17 world-class experts in critical scientific and technology positions through use of streamlined executive staffing procedures).
—Use more innovative recruitment methods to attract better candidates.
—Design and pilot a new performance-based compensation plan for employees and executives, which include:
  —A 5-year contract with controllers union and implementation of a new pay plan.
  —Increased emphasis on performance management and recognition of contributions.
  —Implemented a new agency training policy, which provides more efficient and effective training by increasing flexibility in training design and delivery and by delegating decisions about training to lines of business.
  —Began implementation of a new job evaluation system that eliminates thousands of pages of job grading standards and position descriptions, and replaces them with concise definitions tailored to FAA work.
  —Replaced 150 separate Federal classification guides and instructions (over 11,000 pages) with 50 pages of FAA-specific criteria.
  —Simplified temporary travel and permanent move policies, which provide equitable reimbursement to employees.
  —Reduced administrative requirements and costs for travel and relocation.
  —Communicated personnel reform changes to managers and employees, so that they fully understand changes and how to take advantage of personnel reform flexibility.

Acquisition Reform.—Acquisition reform has helped simplify, integrate, and unify elements of the life cycle acquisition management into a more effective system. For

example, now all acquisition policy is located in one streamlined policy document located on the Internet with automated tools and guidance. Acquisition reform has shifted focus to life cycle management of programs, created an improved structure and process for defining FAA needs and investments. It has established corporate-level decision making for FAA needs and investments, and increased involvement of stakeholders in decisions.

Two examples of programmatic success working within this changing operational environment include the DSR and the HOCSR Programs. These two programs successfully delivered their products within their acquisition program baselines. Among some of the benefits they derived from reform initiatives were:

—stable requirements;
—hiring new personnel faster;
—attracting new staff using the new flexible compensation system;
—using cross-functional team concepts to improve team work and communications;
—using AMS to talk with industry more openly, involving industry in their acquisition process; and
—engaging in teaming with industry.

Substantially streamlined procurement processes produced a 50 percent reduction in the time to award contracts and has increased the percentage of contracts awarded competitively. Based on best value, it has improved communications with FAA vendors and has made significant improvement to the contract protest and dispute resolution process. Award time and vendor's bid and proposal costs have been reduced through the use of qualified vendor's list for repetitive and simplified requirements. Some examples of procurements that gained from this streamlined process are:

—*Transient Voltage Surge Arrestors*.—This acquisition was announced and awarded in a 3-day period instead of the 180 days under the old system. Public announcement time was one day versus 51 days. A purchase order was used instead of a formal Request for Proposal (RFP) award document, which saved both the FAA and contractor time and resources.
—*Low Level Windshear Alert System*.—A sub team evaluated offers and recommended a vendor within 2 weeks instead of at least 6 weeks under the old process.

On a commercial buy of very high frequency omni-directional range items, FAA achieved a 42-day savings in total processing time by issuing a Screening Information Request (SIR) on the Internet (rather than going the Commence Business Daily process) and using the streamlined selection and award process.

Continued implementation of these reform efforts is necessary to realize their full impact on improving operations and delivery of products and services. In addition, full and stable funding for the entire lifecycle of FAA programs is critical to NAS modernization efforts.

Question. Does the FAA need additional reforms or flexibility to manage efficiently?

Answer. The FAA reauthorization proposals submitted to Congress in 1998 and 1999 contained requests for both financial and managerial reforms. While the agency is grateful for both personnel and procurement reform, these are but two elements necessary to elevate the FAA to the level that will be required by both the aviation industry and the flying public in the 21st Century. Study after study, report after report has shown that the FAA must become more business-like in its approach to operations, capital investment, and research and development. This covers all aspects of the day-to-day activities of the FAA. If the FAA is to be more efficient, financial and managerial reforms are necessary. Specifically, three changes are key.

1. *Management reform*.—Congress needs to provide for a chief operating office and other organization changes to allow the Air Traffic Control System to operate more like a business—that is, performance-based and customer-oriented.

2. *Pricing reform*.—Congress needs to replace the current excise tax on airline passengers with cost-based charges on commercial users of air traffic control. This will provide the FAA with the information necessary to respond to its customers, which result in, faster adoption of capacity-enhancing technology and expansion of services in response to market demand. It will also create an incentive for more efficient operation and use of the Air Traffic Control System.

3. *Congressional Mandates*.—Congress needs to put in place an appropriate financial mechanism to ensure that cost-based receipts from air traffic control users are spent exclusively on air traffic control.

AIR TRAFFIC CONTROLLERS PAY INCREASES

Question. On September 15, 1998, FAA agreed to a 5-year labor agreement that promised the United States air traffic controllers substantial raises as well as established a ceiling of 15,000 air traffic controllers. The agreement, which expires in 2002, is estimated to have a net cost of $1.0 billion. How would you describe FAA's relationship with its unionized work forces?

Answer. The relationship with the National Air Traffic Controllers Association (NATCA) is better today than it has been for many years. We are working issues in partnership with the bargaining unit to address and resolve issues in a collaborative manner. This approach has enabled us to work smarter and more efficiently toward our goals. For example, we have been able to move ahead with modernization. We have turned the corner on the STARS Program by fielding the first two systems at El Paso and Syracuse. We continue to work together on developing the advanced versions of this system for future deployment. Another excellent example is the manner in which the NATCA and the FAA worked together to solve issues in the DSR deployment, which will be completed in May 2000. In many facilities, we were able to transition to the new system well ahead of schedule.

Question. Is the 15,000 a floor or ceiling for the number of air traffic controllers?

Answer. The contract says we maintain staffing levels at 15,000 for the first 3 years, with growth limited to 2 percent annually for the last 2 years of the contract. The 15,000 is considered a floor on controller staffing.

Question. How has this contract affected your budget?

Answer. The fiscal year 2001 budget requests an increase of $73 million for pay raises associated with the NATCA contract. Any additional costs will be funded from within Operations.

During the first part of fiscal year 1999, the FAA and NATCA worked to finalize the rules associated with the various productivity articles of the contract and the rules for the new pay system. A metrics team was established to identify and track measurable results of implementing the contract. Early indications from this effort are showing some positive trends, and the FAA will continue to refine and analyze this data to provide additional information to Congress on the results of this effort.

Question. Were there any benefits the agency received as a part of this agreement?

Answer. During the first part of fiscal year 1999, the FAA and NATCA worked to finalize the rules associated with the various productivity articles of the contract and the rules for the new pay system. A metrics team was established to identify and track measurable results of implementing the contract. Early indications from this effort are showing some positive trends, and the FAA will continue to refine and analyze this data to provide additional information to Congress on the results of this contract.

There are many indirect results of the contract with NATCA, including an improved and more productive working relationship between FAA management and NATCA in modernizing the aviation system. An example of this partnership is the manner in which DSR has been fielded throughout the country, resulting in FAA completing many facilities well ahead of schedule. Another example is the STARS Program. The FAA has fielded the first segment of STARS at El Paso and Syracuse, and is working on the advanced configurations of that program.

Question. Does the agreement prevent FAA from implementing action that would make it more efficient?

Answer. By its very nature, any collective bargaining agreement imposes constraints on the agency's ability to take unilateral action to improve efficiency. However, FAA and NATCA are working closely together to identify efficiencies and track measurable results of implementing the contract.

The agency continues to move forward toward full implementation of the collective bargaining agreement, including those initiatives intended to improve efficiency. FAA and NATCA have reached final agreements on accelerated grievance resolution, assignment of staff functions to bargaining unit employees, expanded responsibility and accountability for controller-in-charge, and revised procedures for relocating bargaining unit employees.

A joint FAA/NATCA metrics team was established to identify potential cost savings and/or productivity improvements, and to develop measurement systems for tracking the impact of the collective bargaining agreement and the compensation agreement. To date, the metrics team has determined the contract articles projected to have measurable impact, identified data sources for measuring cost and/or productivity, and validated the reports to be provided to agency managers. The final product of the metrics team will be completed by early summer fiscal year 2000.

FAA PROGRAM PRIORITY

Question. FAA has four main appropriations—Operations, Facilities and Equipment (F&E), Research and Development, and the Airport Improvement Program (AIP). Of these programs, please list in order of priority, which one(s) are the most critical to the agency?

Answer. All four appropriations are critical to the mission of the agency and support the Administrator's goals of safety, security, and system efficiency. The President's budget provides for balanced investment among these programs, and the requests would allow the FAA to improve aviation safety and security by hiring new safety and security inspectors. These requests will also improve efficiency by modernizing equipment and researching new technologies.

For example, the F&E budget cannot be substantially raised without an increase in the Operations budget. F&E modernization equipment cannot be turned over to the Operations budget for acceptance into the NAS without the required funding for staffing, operations and maintenance. Furthermore, this modernization equipment could not have been developed without a strong research and development budget nor could safety be maintained at America's largest airports without funding for improved facilities through the AIP.

Question. Does the FAA have the ability to manage increases in any of these areas?

Answer. Yes; the President's budget request for the FAA contains manageable funding increases for all four of these programs.

FAA'S POSITION ON AIR TRAFFIC CONTROL RESTRUCTURING

Question. In the United States, Congress, the Administration and interest groups have discussed different approaches to restructure and reform of the Air Traffic Control (ATC) System. These have included intergovernmental reforms, making air traffic control a performance-based organization, creating a government corporation, and creating a private corporation. Do you believe that structural air traffic control reform is needed rather than peripheral measures?

Answer. Yes; we believe that structural ATC is needed. To that end, the President recently directed the FAA to come back to him in 45 days with options for achieving broader reform of the ATC System.

Question. What is the prospect of following the Canadian model in the United States?

Answer. The President recently directed the FAA to come back to him in 45 days with a plan for achieving broader reform of the ATC System. We will consider the Canadian model during our deliberations.

Question. If it is your opinion that we cannot copy the Canadian model, what lessons or scales of efficiency can be taken from the model?

Answer. The President recently directed the FAA to come back to him in 45 days with a plan for achieving broader reform of the ATC System. We will consider the Canadian model during our deliberations.

USER FEE PROPOSAL AND COST-BASED ACCOUNTING SYSTEM

Question. For the last several years, the FAA's budget submission has included a user fee proposal. The first step in implementing and gaining acceptance of any user fee is the development of a cost-based accounting system. When did FAA begin working on the development of a cost-based accounting system, what is the current status, and when is it expected to be completed?

Answer. The FAA began its cost accounting initiative in fiscal year 1996. Information and status on this initiative follows:

—FAA's primary focus in cost accounting has been on the Air Traffic Services (ATS) line of business; to include full cost distribution for Air Traffic, Airway Facilities, and all other components of the organization. For cost accounting purposes, ATS has defined four core services they provide to the aviation community: en route, oceanic, flight service stations, and terminal/tower.

—The FAA has successfully identified the fiscal year 1998 costs for en route and oceanic services. For the first time, the FAA knows the "full" cost—direct and indirect—of two of these key air traffic services (en route and oceanic). ATS management has already begun to evaluate benchmarking opportunities using this cost data.

—In March 2000, the FAA will have validated actual en route and oceanic cost for fiscal year 1999. This data will be used as the basis for overflight fees, to be established in the latter half of fiscal year 2000.

—The remainder of fiscal year 2000 will focus on completing the ATS implementation for Flight Service Stations in April 2000 and terminal and tower services in fiscal year 2001.
—Due to fiscal year 2000 funding priorities, the implementation for all remaining FAA lines of businesses has been delayed until fiscal year 2001 and fiscal year 2002. The fiscal year 2001 budget requests $7 million in fiscal year 2001, and the total cost to completion is $14 million. This work will include tracking the "full" cost of NAS modernization projects, the airport capital grant program, the certification and regulation of the airline industry, aviation security services, and other mission support functions.
—An updated implementation schedule is being prepared for review by FAA management, and will be available by April 2000.

QUESTIONS SUBMITTED BY SENATOR FRANK R. LAUTENBERG

DELAYED EFFORTS TO MINIMIZE RUNWAY INCURSIONS

Question. Ms. Garvey, as you know, a great deal of attention has been paid to the growing problem of runway incursions the potentially deadly mistake when an aircraft mistakenly enters a busy runway or taxiway. We are now told that your proposed solution to this problem, the Airport Movement Area Safety System (AMASS), will be delayed at least another 2 years. The Appropriations Subcommittee has never limited the amount of funding for this program. Some years, we actually provided more than you requested. Please explain why this program is being further delayed.

Answer. The single answer is a combination of difficult technical and management issues have produced the delay. Let me explain more fully. The implementation of AMASS at the Nations 34 busiest airports, which is a modification to the Airport Surface Detection Equipment Model 3 (ASDE–3) radar, represents only a portion of the agency's runway incursion strategy. The Agency has established a higher level of FAA executive oversight and has appointed a Director of Runway Safety. This Director serves as the Agency's focal point for the coordination and integration of runway safety activities, within FAA and within industry. The Director is now implementing and executing runway safety initiatives that include education, training, and awareness activities.

The AMASS Program underwent an in-depth review and restructure during the late summer and early fall of 1999. The previous schedule that the agency was attempting to meet had been based on a FAA commitment to the National Transportation Safety Board (NTSB) to have 38 AMASS systems operational at the 34 airports by October 2000. To meet this date, the Agency implemented a very high-risk acquisition strategy and schedule that included concurrent development and production phases. In April 1999, new program requirements were added that related to human factor evaluations. At that point, program management recognized that the development effort required to meet user requirements was far more extensive than envisioned and the October 2000 commitment to NTSB could not be achieved. We also identified additional human factor issues and critical operational issues that required resolution prior to commissioning. The required second level engineering and logistics support functions necessary to implement new equipment into the FAA's NAS had not been adequately planned for, funded, and implemented due to our decision to undertake the high risk acquisition strategy. These operational support issues require additional funding and time to implement. The fiscal year 2000 appropriation and the fiscal year 2001 request for AMASS reflect the cost and schedule changes for those years as a result of the program restructure. Additional funds will be required in future years to continue the implementation and commissioning efforts as well as the implementation of preplanned product improvements validated in the operational requirements document.

Subsequent to the restructure, we are meeting or exceeding planned milestones such as completion of the initial human factors modifications required for commissioning and the installation, testing and acceptance of 20 of the 40 total AMASS systems in the procurement. The operational test and evaluation (OT&E) critical issues have been identified and are being resolved. Factory testing of the majority of these modifications is complete. This testing is in preparation for the OT&E field regression to validate corrections, scheduled for June 2000.

The restructuring of the program was accomplished with the cooperation of all relevant FAA lines of business, and with representation from an AMASS air traffic workgroup, which included NATCA and Airway Facilities technician representatives. In addition, program management personnel changes on both the government

and contractor's part in 1999 have contributed to an improved working relationship and better productivity. Because the restructure effort included extensive risk identification and risk mitigation measures, we are optimistic that program goals will be met. This includes an August 2000 initial operating capability (IOC), an Independent Operational Test and Evaluation starting in September 2000, and commissioning of all systems by the end of December 2002. We have already seen evidence that the previous contractor performance problems have been reduced and that the overall life-cycle supportability of the system within the national airspace will be increased.

AIRPORT MOVEMENT AREA SAFETY SYSTEM (AMASS)

Question. Is this problem really a technical problem, a management problem, or a funding problem?

Answer. The delays associated with the AMASS Program can be attributed to a combination of technical and management issues that are described below. Previous funding for the program is not a contributing factor to the program delay. Let me explain more fully.

The implementation of AMASS at the Nations 34 busiest airports, which is a modification to the ASDE–3 radar, represents only a portion of the agency's runway incursions strategy. AMASS will not reduce runway incursions, but will help prevent accidents if an incursion occurs. We have focused significant efforts on education and training, improved procedures and guidelines, as well as improvements in airport lighting, signage, and surface markings. Only the combination of these efforts and technical solutions like AMASS will have the greatest effect on reducing the problem of runway incursions.

The previous schedule included acquisition strategy and a schedule that depended on concurrent development and production phases. We subsequently recognized that the development effort required to meet user requirements was far more extensive than originally envisioned. We also identified additional human factor issues and critical operational issues that required resolution prior to commissioning. The required second level engineering and logistics support functions necessary to implement new equipment into the FAA's NAS had not been completely planned for, funded, and implemented due to the schedule associated with the high risk acquisition strategy.

The AMASS Program underwent an in-depth review and restructure during the late summer and early fall of 1999. All of the areas identified above were reviewed in-depth during the program restructure process, which included revalidated requirements, risks and mitigation actions identified, schedules developed, and costs to implement estimated. All relevant FAA lines of business and key union representatives participated in the process.

Subsequent to the restructure, we are meeting or exceeding planned milestones such as completion of the initial human factors modifications required for commissioning and the installation, testing and acceptance of 20 of the 40 total AMASS systems. The OT&E critical issues that have been identified are being resolved. Factory testing of the majority of these modifications is complete in preparation for the OT&E field regression testing to validate the corrections, scheduled for June 2000.

In addition, program management personnel changes on both the government and contractor's part in 1999 have contributed to an improved working relationship and better productivity. Because of this participation and the success to date in meeting milestones in the restructured schedule, we are optimistic that we will meet the program goals.

WHY DOES AVIATION DESERVE A GENERAL FUND GUARANTEE WHILE HIGHWAYS DOES NOT

Question. Ms. Garvey, you have had the unique experience of serving both as the Deputy Highway Administrator, and as the FAA Administrator. We have been told by some Members of the House that the FAA must receive a guaranteed amount of non-trust fund dollars to compensate for the overall benefits that our economy receives from our aviation system. Doesn't our interstate highway system also provide extraordinary benefits to our economy?

Answer. The Administration has consistently proposed the elimination of the general fund contribution for aviation programs. We agree that the Interstate Highway System provides many benefits to our economy, and note that under TEA-21, highway users pay for 100 percent of the highway program's infrastructure and operating costs plus 80 percent of transit costs (because highway users benefit from the congestion reduction transit produces). In contrast, aviation users do not fully support their own services, let alone any related services.

Question. Do you believe it is appropriate policy for the FAA to receive guaranteed amounts of general funding when the Federal Highway Administration receives no general funding whatsoever?

Answer. No; the Administration has consistently proposed to eliminate the general fund contribution for aviation programs. Under TEA–31, highway users pay for 100 percent of the highway program's infrastructure and operating costs plus 80 percent of transit costs (because highway users benefit from the congestion reduction transit produces). In contrast, aviation users do not fully support their own services, let alone any related services.

Question. Do you believe there is a reason why FAA's Safety Inspectors should be paid from general funds, while Federal Highway's Motor Carrier Inspectors should be paid from trust funds?

Answer. No; the Administration has consistently proposed to eliminate the general fund contribution for aviation programs. The Administration's proposal is to fund the entire FAA through a combination of excise taxes and new cost-based fees.

QUESTIONS SUBMITTED BY SENATOR CHARLES E. GRASSLEY

USER FEE PROPOSAL

Question. At what point in time is the fine line crossed where the fees that are charged an industry in order to pay for services become fees that hinder growth of that industry?

Answer. Ideally, fees should be set equal to the cost of the services that the industry consumes. Therefore, the budget proposes to collect in aviation taxes and user fees only the amount needed to fund the FAA in the subsequent year. Although we phase this policy in over 2 years, financing the FAA through a combination of aviation taxes and dedicated user fees would promote a more business-like and efficient FAA while ensuring that all aviation revenues are spent for aviation purposes. In addition, charging customers the cost of services received provides a market signal to the FAA as to which services are needed and an incentive for air carriers to use those services efficiently.

ROLE OF THE NATIONAL ECONOMIC COUNCIL IN FAA POLICY

Question. Mrs. Garvey, I would like you to talk to us about the role the National Economic Council (NEC) is playing in developing FAA policy. It is our understanding the NEC has held a number of meetings with the FAA and the aviation community on privatization. Can you tell us the results of those meetings? Will any NEC developed proposals be included in next week's budget submission?

Answer. The NEC provides economic guidance to all areas of the executive branch, which includes the FAA. There have been a number of meetings between the NEC and the aviation community with occasional FAA participation, to discuss various options to organize FAA ATC services in a more business-like fashion.

Question. Mrs. Garvey, for several years the Appropriations Committee has included a provision in its annual funding of the Department of Transportation prohibiting taxpayer funds from being used to develop unauthorized user fees. To your knowledge is the NEC developing a FAA user fee system?

Answer. Both the 1998 and 1999 FAA Reauthorization legislative proposal contained language developing cost-based user fees for air traffic services. The user fees proposed in the President's fiscal year 2001 Budget are based on that proposal, but we won't develop the fees until they are authorized by Congress. To my knowledge, the NEC is not developing any new FAA user fee system.

QUESTIONS SUBMITTED BY SENATOR BOB SMITH

PROJECT DELAYS

Question. Has it been your experience that some FAA projects are delayed due to unanticipated technical or environmental problems and as a result, FAA is then able to advance other projects more quickly to prevent any lapsing of available funds?

Answer. Inevitably, some programs are delayed because of technical or environmental problems. However, this situation is fairly uncommon. When it has occurred, we have generally been able to reprogram either within a program or to other high priority projects. For example, a specific location scheduled for building construction may run into an environmental situation that would delay the project. To maximize the use of the funds, we would reprogram them to another location that is ready

for construction. The FAA generally lapses less than one-half of 1 percent of the funds available, which is considered a prudent business practice.

Question. If so, what criteria does your agency use to advance projects which have been approved for later funding cycles but are ready to get funded now?

Answer. In those situations where funds are available for redistribution or reprogramming to other programs, the criteria for reallocation of funds has generally been based on accelerating those programs with significant near term benefits to NAS safety and efficiency.

QUESTIONS SUBMITTED TO MR. MEAD

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

FUNDING FOR MODERNIZATION

Question. Mr. Mead, from your years of aviation experience both as DOT Inspector General and the director of Transportation Affairs for the General Accounting Office, you have witnessed the problems FAA has experienced with its modernization program. Incorrectly in my view, there are some who believe the solution to air traffic control modernization is simply to throw more money at the problem.

Do you agree with me that providing more and more funding for modernization is not the correct prescription for air traffic control modernization?

Answer. More funding alone is not the answer. While there are investment opportunities, the key is better management. FAA needs to hold management accountable, oversee contractors more effectively, establish effective cost controls, and expedite the completion of its cost accounting system. In addition, FAA needs a strategic business plan to outline its strategy for future investments, control the rising costs of operations, and bring about productivity enhancements. If FAA does not take these steps, Congress will find that additional funding will only go to cost overruns and increased salaries.

Question. If so, why is it that more funding for air traffic control modernization has not and will not translate into meaningful modernization of our system?

Answer. More funding has not translated into meaningful modernization of our system because FAA has not been able to control costs and meet schedules for technologically challenging systems such as WAAS, STARS, and AMASS. The common threads of these systems is that they involve extensive software development, which FAA has difficulties with, and human factors issues, which are not resolved early enough in the acquisition process. Further, FAA does not hold contractors accountable. As I stated in the testimony, the two Free Flight contracts for a software-intensive controller tool are time and material contracts. All risks are with the Government—there is little incentive for cost control and labor efficiency.

Question. In your opinion, do you believe that the FAA should undergo fundamental structural change or does the agency require additional management reforms similar to the personnel and procurement reforms of 1996?

Answer. I would exercise caution in making major structural changes given the excellent safety record in aviation. Any proposal to restructure FAA, particularly any proposal to spin-off air traffic control to a commercial enterprise, must be carefully examined. There are no circumstances where safety oversight can be transferred outside of the Federal Government—this should not even be considered an option because safety oversight in an inherently governmental function.

Far too often, FAA points to external factors as causes of their problems. In 1995, Congress exempted FAA from Federal procurement and personnel rules that FAA said hindered its ability to effectively modernize the Air Traffic Control System. These reforms have had little impact to date. FAA needs to make the reforms they already have more effective by controlling its operating costs, better managing acquisitions, and making sound investment decisions.

ABILITY TO KEEP PACE WITH TECHNOLOGY

Question. Mr. Mead, I understand oceanic air traffic control is one of the fastest growing segments of air traffic. I also understand that oceanic capabilities of the United States are not as advanced as those of NAV Canada.

What contributes to NAV Canada's success in keeping up with rapidly changing technology?

Answer. NAV Canada responds to changing demands by acquiring commercial-off-the-shelf technology. It relies on research and development efforts of the United States and other countries to eliminate high-risk projects. Quite simply, being a commercial enterprise, NAV Canada seeks a rapid return on capital investments,

which results in quicker benefits to the users. In addition, Canada has always used an incremental approach in fielding new technologies. For example, the Gander Automated Air Traffic System (GAATS), which handles over 1,000 flights bound for or arriving from Europe, was developed incrementally and began long before NAV Canada took over control of Canada's air navigation system. The incremental approach increases the likelihood of user acceptance and minimizes the problems associated with implementation of new technology.

Question. Does the structure of NAV Canada contribute to its technological successes?

Answer. NAV Canada must make wise business decisions in spending funds it receives from user fees for new technologies since it no longer receives government subsidy. This structure contributes to managing low risk technology initiatives by using commercial-off-the-shelf technology and relying on others to undertake investment in new cutting edge technology.

AIR TRAFFIC CONTROL PAY INCREASES

Question. Mr. Mead, operation costs will continue to increase as a result of a new pay system for air traffic controllers, which became effective in 1999. This will require approximately $1 billion in net additional funding over the 5-year life of the agreement.

In fiscal year 1999, FAA experienced a $284 million shortfall in its Operation's budget that required reduction in planned safety inspector training and travel. I also understand that FAA will be sending a supplemental request for 2000 operations.

Question. Were the shortfall in funding for 1999 and the supplemental request a result of the new pay system for controllers?

Answer. The majority of the $284 million shortfall in FAA's 1999 Operations budget was in Air Traffic Services ($204 million). This was a direct result of the new controller pay system that FAA did not budget for as well as increases in NAS Handoff costs (costs of maintaining newly commissioned systems that can no longer be funded using appropriated Facilities and Equipment funds). FAA needed the supplemental request due to a shortfall in Operations funds, caused largely by the pay increases for controllers.

Question. How will this agreement with the controllers affect the agency? What effect does the increase in operating costs have on other critical agency requirements, such as modernizing the Air Traffic Control System?

Answer. FAA said the pay increases associated with this agreement would be budget neutral due to productivity enhancements. FAA's commitment has not yet been fulfilled since most productivity enhancements, such as increased use of controller-in-charge positions, have not yet been put in place. FAA now faces significant risks in funding the new controller pay system while, at the same time, meeting other critical agency requirements funded by the Operations account, such as hiring safety inspectors and developing a cost accounting system. These risks are compounded as FAA negotiates new wage agreements with its other workforces, such as maintenance technicians who want similar treatment.

FAA's unconstrained Operations costs have, in the past, had the effect of crowding out other critical agency functions such as modernizing the Air Traffic Control System. However, provisions of FAA's Reauthorization Bill essentially commit funding from the Trust Fund for Facilities and Equipment and the Airport Improvement Program. The issue now is to what extent Congress is willing to provide general fund contributions to fund FAA's Operations.

IG'S OPINION ON RESTRUCTURING

Question. Mr. Mead, the increasing funding requirements for the Operations Program and the risk of this account crowding out other requirements including modernizing the Air Traffic Control System seem to support the idea of restructuring the FAA.

In your opinion, is restructuring or reform needed to ensure the Air Traffic Control System is managed effectively?

Answer. No; FAA does not need to restructure or have additional reforms beyond what the have today. However, it should be managed more effectively and run more like a business. FAA needs to hold management accountable, oversee contractors more effectively, establish effective cost controls, and expedite the completion of its cost accounting system. In addition, FAA needs a strategic business plan to outline its strategy for future investments, control the rising costs of operations, and bring about productivity enhancements.

Question. If you were in our shoes, what actions would you take to modernize and more efficiently manage air traffic control in this country?

Answer. First, FAA must complete its cost accounting system so it can accurately track and control costs and make effective management decisions. Second, FAA should ensure that contracts are written with appropriate controls to protect the Government's interest, shift some of the risks, and hold contractors accountable for satisfactory progress. Finally, FAA must establish a strategic business plan to outline strategies for future investment based upon projected funding, and for controlling rising operations costs. Congress should use FAA's success in meeting these strategies as a gauge for future funding.

RESULTS OF PERSONNEL AND PROCUREMENT REFORMS

Question. Mr. Mead, in 1996, Congress provided FAA the ability to develop and implement acquisition and personnel reforms to address the unique demand on, as well as the needs of, the agency.

It has been 4 years since Congress passed the provision, what tangible results has the FAA achieved directly related to these reforms?

Answer. Under acquisition reform, FAA has been able to award contracts faster under the Acquisition Management System (AMS). Also, FAA has been obtaining more input from contractors, which helps refine requirements before awarding contracts. FAA has deployed systems, such as the Display System Replacement (new en route controller displays) and the HOST (computers that receive, process, and track aircraft movement through the domestic enroute and oceanic airspace), on time and within budget. However, AMS has had little impact in improving the quality, cost-effectiveness, and timeliness of technologically challenging systems, such as the Wide Area Augmentation System (WAAS), Standard Terminal Automation Replacement System (STARS), and the Airport Movement Area Safety System (AMASS).

Under Personnel Reform, FAA can point to a few successes, such as fielding a pilot program of its proposed agencywide compensation plan in the Research and Acquisitions line of business. We have not yet validated the results of this pilot program. The most significant result of Personnel Reform has been the collective bargaining and compensation agreements signed with FAA's air traffic controllers. However, as previously discussed, the price tag for this agreement is large. Overall, much remains to be done under Personnel Reform to achieve an agencywide personnel system that provides for greater flexibility in hiring, training, and placing FAA's workforce to meet the agency's unique needs. In fact, consistent with our findings on Personnel Reform, the National Academy of Public Administration stated in its August 1999 report on FAA's Personnel Reform that "the efforts of the past 3 years have not yet shown results in terms of mission impact and return-on-investment".

Question. Have the reforms made any measurable impact on the major modernization programs?

Answer. The reforms have not had the bottom line impacts on the major modernization programs that were expected. The purpose of acquisition reform was to grant FAA relief from acquisition rules and regulations which FAA claimed was preventing them from completing major modernization programs within cost and on schedule. FAA has made progress in reducing the time to award contracts, but major programs such as WAAS, STARS, and AMASS continue to have significant cost growth and schedule delays. Problems with these three programs are attributable to unrealistic milestones and problems in developing complex software and resolving human factors issues.

NONDEPARTMENTAL WITNESSES

STATEMENT OF JOHN CRICHTON, PRESIDENT AND CHIEF EXECUTIVE OFFICER, NAV CANADA

Senator DOMENICI. Senators, thank you and thank you, and let us go to the next group of witnesses.

All right. Our second panel of experts will now present their testimony. First, John Crichton, President and CEO of NAV Canada; second, Dr. Robert Poole of the Reason Public Policy Institute in Los Angeles, California; and third, Robert Baker, Vice Chairman of American Airlines.

We had hoped for a panel of airline CEOs, but conflicting schedules precluded this, and it was probably more than we ought to expect that we could get them all to come. Enough said.

Let us proceed. In the order that I identified you, would you each note right now that your entire statement—if you have statements—are going to be made part of the record as if you read them?

Mr. CRICHTON. Yes.

Mr. POOLE. Yes.

Mr. BAKER. Yes.

Senator DOMENICI. And then if you could proceed as quickly as possible so there would be time for a few questions. Mr. Crichton.

Mr. CRICHTON. Thank you, Mr. Chairman. My name is John Crichton. I am the President and CEO of NAV Canada.

What is NAV Canada? It is a private, non-share capital corporation which owns and operates the Canadian Civil Air Navigation System. It was incorporated in 1995. It purchased the entire system from the Canadian Federal government for $1.5 billion, and began operations November 1, 1996.

We employed 6,300 people at takeover. That staffing level is now 5,200.

Full scope of operations: air traffic control, and advisory service, flight information services, aviation weather services, and we provide service throughout all of Canada, obviously, but also the northwest Atlantic Ocean, parts of Greenland and the Arctic Ocean.

What is a non-share capital corporation? It is a private company that operates just like any other business corporation, except there are no shareholders. These types of businesses are often referred to as non-profits. That is somewhat misleading because NAV Canada does earn profits and it can earn profits. But what the lack of shareholders means is that the profits are recycled with in the business, either to pay down debt, to finance capital expenditures, or to reduce service fees.

We have four members who act as surrogate shareholders in that they appoint the Board of Directors, they can approve corporate bylaw changes and appoint auditors. Our four members are the Air

Transport Association of Canada, representing the commercial airlines, the Federal Government, our union associations and a business aircraft association. These groups appoint 10 of the 15 members of the Board, and this is one of the—I think keys to success of our company, is that we have those key stakeholders on the Board, and in particular, the customers.

There is no share equity, there are no shares, so our capitalization is in the form of debt, but we are rated double–A by all the major rating agencies in the United States and Canada, and in fact, we—I believe we would probably have the lowest cost of corporate capital in North America.

There is no government involvement of any kind and no financial guarantees from the government at all. We are on our own and operate that way.

Why did Canada choose to privatize the system and to pick this non-share capital model? And I filed with the committee—it was interesting to hear people talk about what has happened in years gone by—but I filed with the committee, and I am sure all of the Senators have—is an excerpt from a testimony given at a parliamentary hearing in Ottawa in 1996, and this is a document that was in fact produced by Transport Canada, who was then operating the system, and it sets out the rationale for the decision to privatize in terms of delays, service problems and so on, and costs, and I think that that rationale is still well-supported today.

Our non-share capital model, it has a lot of advantages for this type of a business. It removes any perceived conflict between personal profits and safety with there not being shareholders. The money, as I say, recycles within the system. It allows for that key stakeholder representation on the Board of Directors. The nature of air traffic control is a natural monopoly, and it is an essential service, but that makes it readily financeable in the capital markets. The customers on the Board in our case, they act as a replacement for the profit motive. They are interested in safe service. They are interested in efficient service and at a reasonable cost. With a corporate structure like this, we become effectively self-regulating from an economic point of view.

PREPARED STATEMENT

Just some highlights of—we are almost 3½ years since we started—just some highlights in terms of system performance. Management and administrative structures have been streamlined 1,100 fewer people or about 17½ percent reduction in the work force. Most of that was done on the administrative side. We are in fact expanding on the operation side. We reduced the capital spending by about 40 percent from what was being spent annually in the government, but we are getting much more product, and our focus now is on truly deliverable projects with proven customer or safety benefits. Our charges for service have reduced by over 30 percent from those amounts of money that were being raised through the Air Transportation Tax, which was repealed. We have also paid our controllers a lot more money; at the same time we got about a 20 percent increase in productivity along with that contract. Our major automation project, the CAATS, which was in serious trouble at the time we took over the system, is now on time and on budget

and will be delivered later this year. We have reduced the rate of operating irregularities in the system from the safety measurement point of view, fielding some very advanced systems, oceanic systems and so on, dealt with about a 15 to 20 percent increase in traffic over the last 3 years, and we are reducing the number of ATC delays that are brought about through things under our control.

Thank you.

Senator LAUTENBERG. Thanks very much.

[The statement follows:]

PREPARED STATEMENT OF JOHN W. CRICHTON

WHAT IS NAV CANADA?

A private, non-share capital corporation which owns and operates the Canadian Civil Air Navigation System.

Incorporated in May 1995.

Purchased the ANS from the Canadian Federal Government for $1.5 billion and began operations on November 1, 1996.

Employed 6,300 people on takeover, current staff level is 5,200.

Corporate headquarters in Ottawa.

Scope of operations:

—Air traffic control
—Airport advisory services
—Flight information services
—Aviation weather services

From—

—7 area control centers (ACC)
—43 control towers
—80 flight service stations (FSS)
—1,400 Navaids
—43 radar sites
—Serves all of Canada including a large part of north west Atlantic Ocean, southern Greenland and a portion of the Arctic ocean.

WHAT IS A NON-SHARE CAPITAL CORPORATION?

A private company that operates like any other business corporation except there are no shareholders.

Often called a "non-profit" company but this is misleading as NAV Canada can and does earn profits.

The lack of shareholders means that profits are recycled to (a) pay debt, (b) finance capital expenditures, or (c) reduce service fees.

Four "members" act as surrogate shareholders in that they appoint the Board of Directors, approve corporate By-law changes and appoint auditors.

NAV Canada's four members are:

—Air Transport Association of Canada—4 Board appointees
—Federal Government—3 Board appointees
—ANS Union Association—2 Board appointees
—Business Aircraft Association—1 Board appointee
—Total 10

Board appoints four unrelated Directors plus the CEO for a total Board of 15.

No share equity means all capitalization is in the form of debt.

NAV Canada is rated "AA" by U.S. and Canadian rating agencies, and has so far issued $1.750 billion in revenue bonds.

No government involvement or financial guarantees of any kind.

WHY DID CANADA CHOOSE TO PRIVATIZE AND TO PICK THE NON-SHARE CAPITAL MODEL?

In 1994 Transport Canada addressed this question before a parliamentary committee and an excerpt from their Testimony is attached.

Rationale then still applies today.

The non-share capital model, as developed for NAV Canada, has the following advantages:

—No perceived conflict between personal profits and safety.
—Allows for key stakeholder representation on the Board

—Air Carriers—Who need and pay 100 percent of the cost of service.
—Government—Custodian of the public interest.
—ANS Unions—Represent 90 percent of employees.
—Business Aircraft—Represent GA customers
—Natural monopoly and nature of essential service makes it readily financeable at low cost.
—High credit ratings provide for a lower cost of capital than equity.
—Customers on Board replaces profit motive as an efficiency driver.
—Economically self-regulating.
—Government is still safety regulator.
—Government personnel and procurement policies dropped.
—Directors and Officers are subject to the common law obligation as fiduciaries to act in good faith and in the best interests of the corporation.
—Conflicts avoided in that Board appointees cannot be:
—Employees, officers or directors of significant customers or suppliers.
—Elected officials or employees of Federal, provincial or territorial governments.
—Union officers.

WHAT IMPROVEMENTS IN SYSTEM PERFORMANCE HAVE BEEN ACHIEVED TO DATE BY NAV CANADA?

Management and administrative structures have been streamlined, 1,100 or 17.5 percent reduction in staffing.

Capital spending reduced by 40 percent—focus now on "deliverable" projects with proven customer and/or safety benefits.

Service charges reduced by over 30 percent from equivalent amount formerly charged to passengers (tax was totally repealed in November 1998).

Air traffic controller productivity increased by about 20 percent with wages increased an average 33 percent (all after a 7 year wage freeze).

Major automation project "CAATS". Now on time and on budget—final delivery in Fall 2000.

World's first "glass" tower opened in Toronto in November 1998.

Reduced rate of operating irregularities.

Introducing most advanced oceanic system in the world in mid 2000 (GAATS—Version 21).

Successfully coped with a 15 percent increase in traffic over last 3 years.

Incidence of ATC induced delays on decline.

CANADIAN AIR NAVIGATION SYSTEM

MODERNIZATION AND COMMERCIALIZATION

A briefing to the Standing Committee on Transportation, October 1994, Transport Canada Aviation.

FEDERAL BUDGET—1994

Transport Canada Initiative.—In order to improve efficiency and achieve long-term savings, TC will review the potential for commercialization of a number of its major activities (such as the air navigation system) in close consultation with affected parties.

RATIONALE

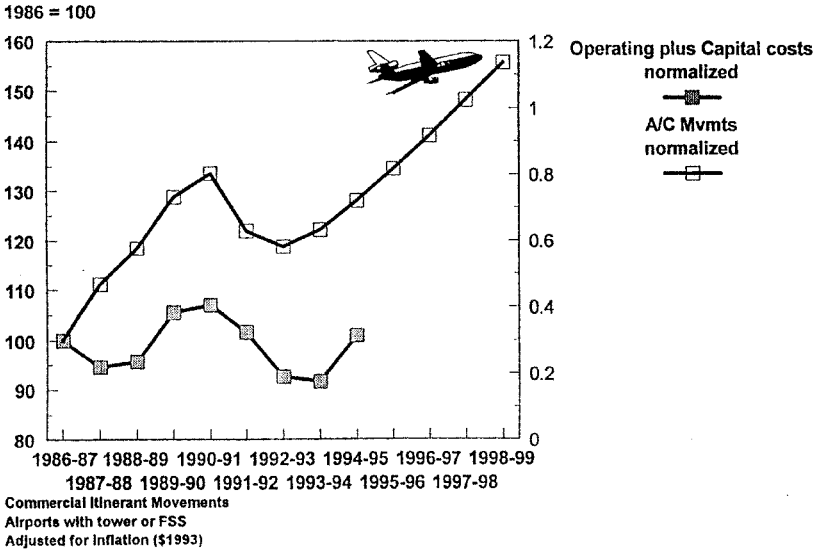
User concerns on quality of service provided and the cost of delays.

Recommendation by associations, airlines, business aircraft operators, airline pilots and air traffic controllers.

Recommendations of reports, studies and Royal Commission.

International experience.

ANS Expenditures vs Traffic



CHARACTERISTICS OF A COMMERCIAL ANS

A commercialized ANS should be:
—free to manage resources and people
—responsive to user needs
—able to procure on commercial principles
—funded by those who use the service
—operated in a business-like way
—accountable to owners and customers

PRINCIPLES

Safety must not be compromised.

There should not be a negative impact on the current structure of commercial and recreational aviation in Canada.

PUBLIC INTEREST

Public interest requires that ANS:
—exists
—is safe
—contributes to national transportation efficiency
ANS provides equitable access to all users.
Remote communities receive appropriate services.
International communities receive appropriate services.
Sovereignty and security needs are met.
There is no abuse of monopoly position.
ANS remains Canadian owned and controlled.

STATEMENT OF ROBERT W. POOLE, JR., PRESIDENT AND DIRECTOR, TRANSPORTATION STUDIES, REASON PUBLIC POLICY INSTITUTE, LOS ANGELES, CA

Senator LAUTENBERG. Mr. Poole, go ahead.

Mr. POOLE. Thank you. I am Robert Poole, Director of Transportation Studies at the Reason Public Policy Institute.

I have been involved with this issue of air traffic control reform since 1981, and it is striking to me how much the debate has changed since then. Today it is pretty widely accepted that air traffic control is basically a commercial service, while air safety regulation is inherently governmental. It is also accepted that FAA's management and corporate culture are really—realistically poorly suited to operating and modernizing a high-tech service business. And it is generally accepted that air traffic control funding should be driven by the growth in aviation activity, not by the constraints of the Federal budget process.

Now, who agrees with these points? The National Airline Commission in 1993, the National Partnership for Reinventing government since 1994, DOT's Executive Oversight Committee, which proposed the USATS Corporation in 1994–95, and the National Civil Aviation Review Commission in 1997.

Now, of course, we heard this morning, and we all know about the big increase in delays last year when growing air traffic bumped right up against the limits of a system that is still technologically and organizationally obsolete. As a result of that, we have had a number of calls from airline CEOs for commercializing or corporatizing the air traffic control system. We now today have 13 years of experience with corporatized air traffic control in 16 countries including Australia, Canada, Germany, New Zealand, South Africa, Switzerland and the United Kingdom. There are a number of common elements that emerge from all of this experience. First, governments have spun off the air traffic control service provider, but not safety—they have kept safety regulation as inherently governmental in-house, and put it at arm's length from the service provider.

Second, the air traffic control corporations are generally operated on a not-for-profit basis as Mr. Crichton said, because it is a monopoly. Excess revenues are recycled back into the system or used to lower charges in the following year.

Third, the air traffic control corporations are funded directly by their users through fees and charges, and this makes the company accountable to the customers. As they say in Canada, user pay means user say.

Fourth, the companies fund modernization by issuing long-term revenue bonds based on a predictable revenue stream, and this gives them much greater ability to plan and manage.

We can also see now that air traffic control commercialization works. It solves the problems that are plaguing government-run air traffic control in country after country. The unit costs of providing service go down, modernization moves more quickly, and flight delays are reduced, and in no country has there been any problem or reduction in air safety from doing this.

So how can we apply this experience to the United States? My organization, Reason Public Policy Institute, is working on a de-

tailed proposal for a U.S. air traffic control corporation. We are seeking input from the entire aviation community. This is a work-in-progress, so I cannot give you the final result, because we are not finished yet, but I can give you some things that are emerging out of our work.

First we think that the stakeholder controlled not-for-profit corporation is probably the best model for this country. It is working very well in Canada, and it harkens back to the original days of air traffic control by ARINC in this country. The kind of corporation we are working on would provide all civilian air traffic control services in the United States and oceanic, would hire a top management team to run the company, but would take over nearly all the current staff of FAA's air traffic services, and all of FAA's current air traffic control facilities, would keep its books using Generally Accepted Accounting Principles, naturally, would pay market-based compensation to all of its employees to insure the best possible talent for every position, and would be free to define and purchase new technology just the way a private business does.

The most crucial element of this reform in our view would be direct user payment by the users to the corporation. The reason for this is that it is so important to develop a corporate culture that takes the customer seriously and gives them what they want, and does not try to foist on them things like microwave landing systems that they do not want. And that will happen only if the company gets its revenue by satisfying its customers. Developing fair and simple air traffic control fees is no easy task, and we have not completed our proposal on that yet, but we do expect to recommend that the current FAA user taxes be abolished and replaced by fees and charges that will be charged only for services rendered. In other words, a private plane using an airport without a tower would not be paying anything under the kind of reform we are looking at, but all of the stakeholders, including private pilots who do use the system, would have representation on the board of the corporation, as is the case with NAV Canada. The overseas experience shows that these kinds of corporations can be self-supporting, they can get investment-grade ratings, and they can easily fund modernization by issuing long-term revenue bonds.

For regulatory purposes, clearly, the FAA would need to be a strong safety regulator, exercising arm's-length oversight, just as it does today with regard to the airlines, pilots, mechanics and manufacturers. All are regulated at arm's-length by the FAA. Congress, of course, will continue to have the responsibility to fund the slimmed-down FAA and DOT and their needed oversight functions including the operation of air traffic control by the corporation.

Finally, just one more thought. I really want to stress the urgency of structural reform along these lines. The current system is not keeping pace with the growth. It is failing to modernize in a cost-effective fashion. If we are going to avoid gridlock in the skies and on runways, we have to develop a modern satellite-based system based on GPS and data links, and we believe that a user-driven customer responsive corporation is really the best way to get there.

PREPARED STATEMENT

I'll be happy to answer questions when the time comes.

Senator DOMENICI. Thank you, Mr. Poole.

[The statement follows:]

PREPARED STATEMENT OF ROBERT W. POOLE, JR.

SHIFTING AIR TRAFFIC CONTROL TO A USER-FUNDED CORPORATION

My name is Robert W. Poole, Jr. I am the director of transportation studies at the Reason Public Policy Institute in Los Angeles. As a former aerospace engineer, I have been studying transportation issues for more than 20 years and have advised the U.S. Department of Transportation and various congressional committees on a number of occasions. In 1997 we were asked to advise the National Civil Aviation Review Commission, as it assessed the problems of the Nation's Air Traffic Control System.

I have been involved with ATC reform since the days of the PATCO strike in 1981. I'm impressed by how much the debate has changed over the years. There is a broad consensus within aviation policy circles on many issues that used to be very contentious. It is now widely accepted that ATC is an essentially commercial service, and that it is separate from air-safety regulation, which is inherently governmental. It is also increasingly accepted that the FAA's management and corporate culture are poorly suited to operating and modernizing a high-tech service business—and have not been significantly improved by the modest 1996 reforms of procurement and personnel systems. And it is also widely accepted that ATC funding should be driven by the growth of aviation activity—and not by the ups and downs of the Federal budget process.

These conclusions are reflected in the work of the Administration's National Partnership for Reinventing Government. The same conclusions inspired the DOT's U.S. Air Traffic Services Corporation proposal in 1994–95. They underlie the strongly worded findings of the National Civil Aviation Review Commission in 1997. And they are backed up by nearly two decades of GAO reports and think tank studies. Last year—just as NCARC warned—growing air traffic bumped up against the limits of our creaking, obsolescent ATC System, resulting in record levels of airline delays, costing airlines and their passengers billions of dollars in extra costs and wasted time. That experience has led to a growing chorus from airline CEOs calling for removing the ATC System from the FAA and setting it up as a user-funded business. The bible of the industry, *Aviation Week*, has editorially endorsed that approach for several years.

One factor that has helped to shape this growing consensus is the actual experience of commercializing air traffic control around the world. Twenty years ago, when I first began working on this concept, there were no commercial ATC corporations to be found. The few that had been started—as non-profit airline cooperative efforts, in the United States in the 1930's by ARINC, and in Cuba and Mexico—had all been taken over by their respective governments.

But beginning in the late 1980's, the same problems that plague our ATC System—inadequate or uncertain financial resources, poor cost-accounting, crippling bureacratic rules on personnel and procurement, etc.—led to a growing wave of reform. One after another, starting with New Zealand, ATC operations were restructured as commercial corporations, either wholly owned by government or as non-profits controlled by the various aviation stakeholders. Among those taking this path are Australia, Canada, Germany, South Africa, Switzerland, and the United Kingdom ATC restructuring has been brought about by governments of both left and right, including Labor governments in New Zealand and the United Kingdom and a center-right government in Germany. You have heard this morning of the success of ATC commercialization in Canada.

Four common elements emerge from these various ATC reforms:

—First, in virtually every case, governments have spun off the ATC service provider but have kept safety regulation as part of the government's transportation agency. Putting safety regulation at arms-length from service delivery is seen, correctly, as a way to improve air safety.

—Second, in every case but one, these ATC corporations are operated on a not-for-profit basis. (That one exception is the United Kingdom Labor government's current proposal to sell 51 percent of the National Air Traffic Service to private investors.) Because ATC is one of those rare cases of natural monopoly, it makes sense to operate it in this way, with any excess revenues either re-in-

vested back in the corporation or used to reduce the following year's fees and charges.

—Third, nearly every one of these ATC corporations is funded directly and completely by its users. Fees and charges are the prices of the company's services; they do not get sent to the government, to be appropriated (or held in a trust fund). They are paid directly by the customers to the service provider (as with electricity charges by TVA and postal charges by USPS). And that makes the company accountable directly to its customers. As they say in Canada, "user pay means user say."

—Fourth, these ATC companies are able to fund modernization by issuing long-term revenue bonds, based on their predictable stream of revenue from fees and charges. Indeed, NAV Canada's bonds had no trouble receiving investment-grade ratings. The financial community loves this kind of investment.

In addition to these common features of commercialized ATC corporations, we also find a common pattern in their experience. To put it simply, ATC commercialization works. By that I mean: it solves the problems that have plagued government-run air traffic control in country after country. Following commercialization, we typically find that the unit cost of providing ATC services goes down, modernization proceeds more quickly and smoothly, and flight delays are therefore reduced. In no country has there been any reduction in air safety, and most observers believe safety levels have increased.

In short, compared to 20 years ago when ATC commercialization was mostly theory, today we can draw on a wealth of experience from around the world. All of it points to the conclusion that moving ATC out of a government bureacracy, converting it into a commercial corporate form, charging users directly for services and making it directly accountable to those users for its performance, and regulating it at arms-length for safety—this kind of fundamental reform works.

The logical next question is: How can we apply this experience to the United States? That is the question that my organization is currently addressing. Our three-member project team is developing a detailed proposal for an Airways Corporation that could take over ATC functions from the FAA and operate in a commercialized manner. We are seeking input as we go along from the entire aviation community—major airlines, low-fare airlines, cargo carriers, air-taxi operators, business aircraft owners, recreational flyers, air traffic controllers, and others. Since this is a work in progress, I cannot give you definitive results just yet. As you can imagine, this is a very complex project, and different stakeholders have somewhat different interests that must be taken into account in coming up with a workable plan. But I can give you some broad outlines of where we think we are heading.

First, having reviewed the global ATC reform experience, we believe that the stakeholder-controlled not-for-profit corporation is probably the best model for the United States. It is working very well in Canada, with which we share a major border and have extensive air commerce. And it harkens back to the origins of U.S. air traffic control, which was begun on exactly this basis by Aeronautical Radio, Inc. (ARINC) in the 1930's. So we are defining a non-profit ATC corporation with a stakeholder-controlled board of directors.

The Airways Corporation would provide all civilian ATC services in the United States and in the oceanic regions for which this country is responsible. It would hire a top management team to run the company, but would take over essentially all of the current FAA staff in Air Traffic Services and all current FAA ATC facilities. It would keep its books using generally accepted accounting principles (GAAP) like a normal company. And it would be free to pay market-based compensation to all its employees—both management and non-management—so as to ensure the best possible talent for each position. It would be free to define and purchase new technology in the same way as any private business.

We believe the most crucial element of this reform is direct user payment to the corporation for ATC services. It is absolutely crucial to develop a corporate culture that is driven by and responsive to customer needs. That will only happen if the company must derive its revenues by meeting their needs. This process is what drives the remarkable productivity of the entire U.S. economy. And we can now see that it works in air traffic control, as well. To repeat the *leitmotif* of Canadian ATC reform, "user pay means user say."

To be sure, we recognize that developing the specifics of ATC fees and charges is no easy task. We are devoting considerable effort to coming up with a pricing proposal that is both simple and fair to all aviation users. Until we've done a lot more work, and gotten a lot more private feedback from user groups, I don't want to go into more specifics on this issue. But because we all know that private pilot groups have great concerns about this issue, let me say just a few words on that score.

We anticipate that our plan will propose that current Federal aviation user taxes be abolished, as part of the transition to the new, commercialized system. The underlying principle is that the new ATC fees and charges will apply only where users make actual use of ATC services. A private plane shooting touch-and-go landings at a non-towered airport is not using the system and should not be charged by the system—or by the Federal Government. But those who do use ATC services should pay for the use of those services—again, in as fair and simple a manner as possible. And as stakeholders in the system, they should be represented on its board. This includes military and civilian government users, whose budgets should include the cost of using ATC services, just as it includes buying fuel for their aircraft.

Next, let me address funding for the remaining FAA functions. Without its ATC operations, the remaining FAA would have two main programs: safety regulation and airport grants. We believe that safety regulation is inherently governmental. The one difficult area is AIP grants for airports. We all know that this country is short of airport capacity, but that expanding existing airports and building new ones in places where they are needed are both very difficult. The problem seems to be less one of funding than of overcoming local opposition to noise and traffic. We do not yet have a specific proposal on how best to pay for airport improvements—but we are working on it.

Getting back to the Airways Corporation itself, the overseas experience demonstrates that it can easily be self-funding. Like any other utility business providing a vital public service (e.g., electricity or water) by investing in long-lived infrastructure, the most appropriate way to pay for such infrastructure is via long-term revenue bonds. With a robust stream of revenue from fees and charges, such bonds could easily earn investment-grade ratings. Wall Street will be only too happy to arrange these bond issues. Hence, we strongly recommend that the corporation not be allowed to borrow from the Treasury. Since one of the key objectives of this reform is to develop a user-responsive corporate culture—i.e., one that will choose wise and cost-effective investments, rather than white elephants such as the now abandoned Microwave Landing System—is important that all such investment plans be required to pass the market-testing of the financial markets.

Finally, let me address the question of regulation. There are two potential types of regulation involved: safety and economic. In terms of safety regulation, the FAA will become the arms-length regulator of the new corporation. That will put air traffic control on the same basis as all the other participants in the aviation system: airlines, private plane owner/operators, airframe and engine producers, airports, pilots, and mechanics. All are regulated at arms-length by the aviation safety regulator. It will be no different in the case of the ATC service provider. Most countries that have commercialized ATC consider this separation of regulation from operations to be a significant strengthening of air safety.

When it comes to economic regulation, I noted previously that the Airways Corporation will be a natural monopoly. The corporate structure we propose is a not-for-profit corporation with a stakeholder board—essentially, a user cooperative. In theory, such a structure should represent the interests of its customers and not require the usual kind of public utility regulation (whose purpose it is to look out for the interests of its customers). However, we all know that the interests of business-jet operators and those of cargo carriers and those of major airlines are not identical. We believe there will still be a need for external review and appeal of the corporation's decisions on such things as fees and charges and of changes in levels of service. At this point, we think such review and appeal is best carried out by the DOT, just as appeals from rail shippers can be taken to the DOT's Surface Transportation Board.

Congress will, of course, continue to have the responsibility to fund the FAA and DOT, and to exercise the needed oversight of all of their operations, including their regulatory responsibilities with respect to air traffic control.

In closing, I would like to stress the urgency of this kind of fundamental, structural reform of the way we provide and pay for air traffic control in this country. The current system has failed to bring about modernization of the ATC System—modernization that is essential if we are not to succumb to gridlock and far worse delays than were experienced last spring and summer. The shift from ground-based to space-based ATC, based on GPS and data link, promises a huge increase in both en-route and runway capacity. But the FAA has been institutionally incapable of delivering this modernization, wasting billions on such fiascos as the Advanced Automation System and the Microwave Landing System.

There are several reasons for this structural failure. One is the FAA's cumbersome procurement process. When a new generation of computer electronics comes along every 18 months and it takes the FAA 5 to 8 years to procure a new system, you have a recipe for getting further and further behind the state of the art. This

is due in part to the FAA's proclivity for defining everything to death in-house, rather than making creative use of off-the-shelf systems where feasible. A commercial ATC corporation will be able to upgrade its technology as quickly and efficiently as other high-tech businesses.

Another structural problem is uncertain funding. The vitally needed controller-to-pilot data link is a key element in free flight, but is being delayed by stop-and-go FAA funding. Implementing data link requires synchronized schedules involving airlines, avionics makers, and ATC facilities on the ground—but FAA budget problems play havoc with this synchronization. An ATC corporation would have assured funding for such modernization programs via its revenue bonds.

But the most important structural failing is this: the FAA is not customer-driven. Regarding free flight, WAAS, data link, and other key technologies, there is no urgency or sense of commitment to meeting users' needs as soon as possible. This is a basic problem of corporate culture. And it will only be solved when the ATC organization is paid directly by its customers and held accountable for results by those customers.

This concludes my presentation today. As I said previously, my comments are based on our work-in-progress on defining a plan for ATC commercialization that can gain widespread support within the aviation community. We are not there yet, but we are making good progress. I should have a lot more to report several months from now.

Senator DOMENICI. Mr. Baker from American Airlines, we would be pleased to hear your statement.

Senator LAUTENBERG. Before Mr. Baker makes his statement, Mr. Chairman, I was at a presentation made by American Airlines this morning, and it knocked the socks off people that were sitting there, because they were going to give us more room in the seats, Mr. Chairman, and I had a legislative redress that was stopped en route, because we could not get enough activity within the Senate. But that was a very positive thing, and I hope that it sets an example for all the airlines to accommodate the comfort and the ease of travel for passengers throughout. And I am not endorsing American Airlines, but I do like the idea.

Chairman DOMENICI. You liked what they said.

Senator LAUTENBERG. I do love it, Mr. Chairman.

STATEMENT OF ROBERT W. BAKER, VICE CHAIRMAN, AMERICAN AIRLINES, INC.

Mr. BAKER. Thank you, Senator. I will have just a few words about that in my remarks.

I am Bob Baker. I am Vice Chairman of American Airlines, and I want to start by expressing my appreciation to the leadership and members of the Senate Budget and Appropriations Committees for the opportunity to testify about the serious challenges facing the air traffic control system in our country.

But before I turn to that subject, I want to take this opportunity to tell the members of these committees about an important announcement that we made earlier today. Last year the airline industry received very harsh criticism from many quarters for failing to provide the kind of high-quality customer service that the public has every right to expect. Many Members of Congress joined the critics, either responding to the complaints of their constituents or based on their own dissatisfaction.

In response, the individual carriers have pledged to new customer service plans, addressing everything from baggage handling to ticket refunds and prompt accurate information about delays and cancellations. Accurate information is certainly a hallmark of aviation and customer service. Compliance with these plans will be

reviewed on an ongoing basis by the Inspector General of the Department of Transportation.

This morning American Airlines took passenger service to a new level. Just across town our Chairman and CEO, Mr. Don Carty, announced that as part of a $400 million program to refurbish the interiors of our entire fleet, American Airlines will give our passengers more of what they really want, more space. By removing two rows of seats from every aircraft and reconfiguring the coach cabin, we will increase seat pitch and provide more space for every passenger, not just a few rows in first class. Mr. Carty regrets very much that he is unable to be here today because of the long-planned event surrounding this ground-breaking announcement.

And now I will return to the purpose of this hearing, the issues surrounding air traffic control. As we enter the year 2000, the air traffic statistics for 1999 show trends that raise concerns about the upcoming summer traffic season and the years beyond. An efficient and safe system for ATC is the basic foundation, the bedrock upon which we strive to provide a safe, predictable, and quality service to our customers. When we implemented our customer service plan late last year, we discovered a lot of ways in which we could improve our service. At the same time, we realized our most important basic customer service, on-time performance, is fundamentally dependent on air traffic control.

And while the aviation industry can improve some elements of customer service, we cannot unilaterally address the challenge posed by an outdated air traffic control system. For that we need the help of Congress, the FAA, the air traffic controllers, and many, many others.

In order to understand the present challenge to the Air Traffic Control System, we must address three questions: When do we need to start? What do we need to do? And how do we get it done?

In the case of air traffic improvements "when" is a critical question. We all want to avoid gridlock, but there are long lead times, starting with capital investment and proceeding through the development, testing and training that must precede the implementation of new systems. Most of you know that we completed a study in 1997 and were alarmed to discover that we are already approaching the point at which the air traffic system becomes overloaded.

Our 1999 operating results at American confirm that the trend in the U.S. air traffic control delay situation continues to escalate, with the total number of delays up 36 percent, and the total minutes of delay up 34 percent over the corresponding 1998 figures. This is an alarming increase as compared to our 1998 operating results, where the total number in minutes of air traffic delay were up only 5 percent and 9 percent respectively. Our 1999 operating delays coupled with a dramatic increase in customer complaints related to delays and cancellations serve as an urgent wake-up call to the approaching chaos that our study predicts will exist by 2005. Five years, mind you, is the most optimistic projection for implementation, and given the size and complexity of the air traffic control system, 5 years is really just around the corner.

Which brings us to the next question: What do we need to do to modernize and which things do we do first? Using the results of our own study and other research en route and terminal airspace

are the first targets, because changes in these areas require new aircraft and air traffic capabilities that will take many years to develop, install and train our pilots and controllers to use. At the same time we look to new technologies and innovative management to improve efficiency in the air. Airport facilities and ground infrastructure must be developed as well. In the final analysis, successful modernization will require that all elements of our system receive much needed improvements. That is where the Free Flight Program comes in. With the guidance and leadership of Administrator Garvey, this unprecedented collaborative process represents important industry and government consensus for determining the path to modernization. Although this consensus has already achieved some important milestones in the development of Free Flight technology and processes, without continued leadership and support from Members of Congress and the Administration, we are unlikely to reach our goal in time.

A comprehensive approach to air traffic modernization must address the three fundamental components of the system: communications, navigation and surveillance. The first, communications, connects the people who are making and coordinating the operation decisions in our system. This includes people in the command center, controllers in our air traffic control centers, people in our airline operations control centers, and finally, the pilots who fly the aircraft. Communications modernization means insuring that these important participants have the tools, resources and training necessary, not only to increase the capacity of our current systems, but also to increase the already high level of safety we have achieved. Sufficient radio band width or spectrum, for example, is absolutely essential if we are to eliminate the traditional voice-only bottleneck that characterizes pilot control or communications today. New operating capabilities and airspace capacity with improve safety can be realized by upgrading the old analog voice and teletype systems to new digital voice and data link communication systems.

A modern air traffic system must also include satellite-based navigation capabilities. Currently, airspace capacity is constrained by our traditional ground-based radio navigation facilities, which have significant location and range limitations. Satellite-based navigation systems will enable us to redesign our airspace, to increase the throughput of both the en route and terminal airspace. This increased accuracy, enabled by satellite augmentation systems such as the Wide Area or Local Area programs, will allow us to design new airport approach and departure procedures, dramatically improving safety, efficiency and an environmental impact that will certainly be positive.

The final component is surveillance, which most of us think of as radar. By augmenting radar using aircraft transmitted data, we can unlock new applications that can improve our ability to better manage air traffic by detecting traffic conflicts earlier, both in the air and on the ground. This promises to be an important part of addressing the growing problem of airport runway incursions.

Once we know what to do, we have to address the most difficult question of how do we get it done? If we are to avoid rapidly approaching gridlock, we must, starting now, insure the commitment to pay for modernization and infrastructure development, not just

this year, but on an ongoing multi-year basis. Such consistent funding is a key cornerstone to managing any investment risk. Unfortunately, the needed funding must pay the escalating cost of operating, maintaining and staffing the current ATC System, while also making the investments in the improvements necessary to insure our future. Because of the urgent need to get started on the programs, infrastructure and reforms necessary to guarantee aviation's future, I urge you to find a way to resolve whatever remaining issues are preventing passage of the FAA Reauthorization Bill.

PREPARED STATEMENT

In conclusion, I believe that the safety and efficiency of the air traffic control system can be improved simultaneously. Thanks to the leadership of Administrator Garvey, we have a plan. Short-term improvements may buy us some time while we pursue the development and implementation of real solutions, but we cannot hesitate much longer. We must begin modernizing our systems and operating structures today if we want to avoid the gridlock in the skies tomorrow. We need your support to get an FAA Reauthorization Bill passed to insure the funding and management reforms that will put us on the right path.

Thank you very much.

Senator DOMENICI. Thank you.

[The statement follows:]

PREPARED STATEMENT OF ROBERT W. BAKER

Thank you, Mr. Chairman and members of the committees: My name is Robert Baker, and as the vice-chairman of American Airlines, it is an honor to have the opportunity to present American's views on the need to modernize our air traffic control system.

As we enter 2000, the air traffic statistics for 1999 show trends that raise concern about the upcoming summer traffic season and the years beyond. An efficient and safe ATC System is the basic foundation, the bedrock, upon which we strive to provide a safe, predictable, and quality service to our customers. When we implemented our customer service plan last year, we discovered a lot of ways in which we could improve our service. At the same time, we realize our most important, basic customer service—on time performance—is fundamentally dependent on air traffic control. And while the aviation industry can improve some elements of customer service, we cannot unilaterally address the challenge posed by an outdated ATC System. For that, we need the help of Congress, the FAA, the air traffic controllers and others.

In order to understand the present challenge to the ATC System, we must address three basic questions: When do we need to start? What do we need to do? How do we get it done?

In the case of ATC improvements, "When?" is a critical question. We all want to avoid gridlock. But there are long lead-times, starting with capital investment and proceeding through the development, testing and training that must precede the implementation of new systems. Most of you know that we completed a study in 1997 and were alarmed to discover that we are already approaching the point at which the Air Traffic System becomes overloaded. Our 1999 operating results confirm that the trend in U.S. ATC delay continues to escalate, with the total number of delays up 36 percent and total minutes of delay up 34 percent over 1998 figures. This is an alarming increase as compared to our 1998 operating results, where the total number and minutes of air traffic delay were up 5 percent and 9 percent respectively. Our 1999 operating delays, coupled with the dramatic increase in customer complaints related to delays and cancellations, serve as an urgent wake-up call to the approaching chaos that our study predicts will exist by 2005. Five years, mind you, is the most optimistic projection for implementation. And, given the size and complexity of the ATC System, 5 years is just around the corner.

Which brings us to the next question, "What do we need to modernize and what do we do first?" Using the results of our own study and other research, enroute and

terminal airspace are the first targets, because changes in these areas require new aircraft and air traffic capabilities that will take many years to develop, install, and train our pilots and controllers to use. At the same time we look to new technologies and innovative management to improve efficiency in the air, airport facilities and ground infrastructure must be developed as well. In the final analysis, successful modernization will require that all elements of our system receive much-needed improvements.

That's where the free flight program comes in. With the guidance and leadership of Administrator Garvey, this unprecedented collaborative process represents important industry and government consensus for determining the path to modernization. Although this consensus has already achieved some important milestones in the development of free flight technology and processes without continued leadership and support from Members of Congress and the Administration, we are unlikely to reach our goal in time.

A comprehensive approach to ATC modernization must address the three fundamental components of the system: communications, navigation and surveillance. The first, communications, connects the people who are making and coordinating the operating decisions in our system. This includes people in the FAA command center, controllers in our air traffic control centers, people in our airline operations control centers, and pilots who fly the aircraft. Communications modernization means ensuring that these important participants have the tools, resources and training necessary not only to increase the capacity of our current systems, but also to increase the already high level of safety we have achieved. Sufficient radio bandwidth, or spectrum, for example, is absolutely essential if we are to eliminate the traditional voice-only bottleneck that characterizes pilot-controller communication today. New operating capabilities and airspace capacity with improved safety can be realized by upgrading the old analog voice and teletype systems to new digital voice and data communication systems.

A modern ATC System must also include satellite-based navigation capabilities. Currently, airspace capacity is constrained by our traditional ground-based radionavigation facilities, which have significant location and range limitations. Satellite-based navigation systems will enable us to re-design our airspace to increase the throughput of both enroute and terminal airspace. The increased accuracy enabled by satellite augmentation systems, such as the wide-area (WAAS) or local-area (LAAS) programs, will allow us to design new airport approach and departure procedures, dramatically improving the safety, efficiency, and environmental impact of take-off and landing patterns.

The final component is "surveillance," which most of us think of as radar. By augmenting radar using aircraft-transmitted data, we can unlock new applications that can improve our ability to better manage air traffic by detecting traffic conflicts earlier, both in the air and on the ground. This promises to be an important part of addressing the growing problem of airport runway incursions.

Once we know what to do, we have to address the most difficult question of "how" to get it done. If we are to avoid rapidly approaching gridlock, we must, starting now, ensure the commitment to pay for modernization and infrastructure development, not just this year, but on an ongoing, multi-year basis. Such consistent funding is a key cornerstone to managing any investment risk. Unfortunately, the needed funding must pay the escalating costs of operating maintaining and staffing the current ATC System, while also making the investments in the improvements necessary to ensure our future. Because of the urgent need to get started on the programs, infrastructure and reforms necessary to guarantee aviation's future, I urge you to find a way to resolve whatever remaining issues are preventing passage of the FAA reauthorization bill.

In conclusion, I believe that the safety and efficiency of the ATC System can be improved simultaneously. Thanks to the leadership of Administrator Garvey, we have a plan. Short-term improvements may buy us some time while we pursue the development and implementation of real solutions. But we cannot hesitate much longer. We must begin modernizing our systems and operating structures today, if we want to avoid gridlock in the skies tomorrow. We need your support to get a FAA reauthorization bill passed to ensure the funding and management reforms that will put us on the right path.

Thank you.

Senator DOMENICI. I just have three questions, one for each of you, and I will take you first, Mr. Baker, and then I am going to yield to Senator Lautenberg, who will close the meeting down.

So I do not forget, I want to thank all three of you. I think the testimony, not only your oral testimony, but your entire testimony, will be of relevance, and certainly an eye-opener to a number of people who want to read and try to see what is going on elsewhere in the world.

In reading your testimony, Mr. Baker, I noted that you mention airport facilities and ground infrastructure sort of in passing, and you do not highlight it as a problem to be addressed in the, quote, "What do we need to modernize and what do we need to do first" section. Should we take that to mean that the Airport Improvement Program funding or passenger facility charges are not a priority for your airline?

Mr. BAKER. No; I think the proper structure would be a balanced approach of en route improvements, terminal area improvements, which are basically air traffic control, coupled with an ongoing process of improving facilities, both runways, taxi-ways, as well as terminal facilities, to meet the demand on these facilities. I think they all have to go on simultaneously, and they are all equally important to the overall capacity of aviation.

Senator DOMENICI. Thank you.

Mr. Crichton, Mr. Mead's statement indicated that NAV Canada is relying on the FAA for key emergency technologies. In turn, your material indicates that NAV Canada will introduce the, quote, "most advanced oceanic system in the world this year." Is there an opportunity for cooperation or more cooperation between the FAA and NAV Canada in the development and fielding of new air traffic control technology?

Mr. CRICHTON. Thank you, Mr. Chairman.

There is significant potential, and in fact, some of it is being realized. I think historically there has been a participation back and forth across the border. For instance, we are involved in the WAAS Program with the FAA, in a small way in assisting in that. The FAA has developed some tools that we find very interesting. Our oceanic system, actually, we are in discussions with the FAA to possibly make that available as part of their procurement process as well, so I think there is a tremendous scope for sharing between ANSs, and certainly there is a longstanding cooperative working relationship between NAV Canada and the FAA.

Senator DOMENICI. Just my wrap up question to both you, Mr. Poole, and yours might have to be theoretical and yours, Mr. Crichton, can be practical based on what exists. But obviously there is a tremendous opposition to privatization here from those who work for the FAA and from the unions that are part of it. They have their reasons for being against it. I just have a question. From the standpoint of pay and the non-profit corporation, what has resulted from that in terms of comparable pay before and after the institutional change, and perhaps comparable pay with U.S.A. comparable jobs?

Mr. CRICHTON. Mr. Chairman, with respect to the air traffic controller portion of the work force, the contract that we entered into last summer with them, saw an average increase of 33 percent in their pay, and that varied depending on location of the controller and their grade, and some of them were actually 40 percent, and

some, obviously, a bit less than the 33 percent, and that was for a 39-month contract, just a little over 3 years.

Now, we bargained in return and got demonstrable productivity improvements in work rules of at least 20 percent, and that was unique, because historically, I think the bargaining process, particularly with government, has been more of a one-way street, where the process would see concessions given or raises or so on, and very little coming the other way, so that was quite unique, and it at times was traumatic to negotiate it, but we got it done.

Mr. POOLE. Senator, I would like to say that I am not here advocating privatization of air traffic control in the sense that it is often meant. The word around the world usually means turning something over to a for-profit company with shareholders.

Senator DOMENICI. I understand.

Mr. POOLE. I am using the term "corporatization" or "commercialization" to mean creating something much more like NAV Canada, which is a direct user-serving organization, and——

Senator DOMENICI. If I used the word "privatization", I mean——

Mr. POOLE. I appreciate it, but I think it is an important semantic distinction.

Senator DOMENICI. I am trying to use the word that Mr. Crichton described as to what they have done in Canada.

Mr. POOLE. But this is relevant in terms—the unions, including the current controllers' union in the United States, has consistently spoken out against privatization, and they include in that the Contract Tower Program which is run by for-profit companies. On the other hand, they are on record in 1994, 1995, as endorsing the Administration's USATS corporation concept, and they recently have reaffirmed that support. So I mean I think there is definitely room there to talk with them seriously about an air traffic control corporation that is outside of the structure of the FAA, that is funded by the users, that meets the needs of users and is free to borrow in the capital market and so forth, as long as you adequately protect pension benefits, insure market-based compensation and so forth. I do not see this as a huge—I mean it is an issue definitely, but it is not an insuperable stumbling block as it might be if we were talking about turning it into a for-profit company.

Senator DOMENICI. Well, let me make sure the record is correct in terms of my use of words. There is opposition to privatization, as privatization is conventionally used, and I have been told there is not as much opposition, perhaps even some favor, shown towards the kind of entity that you are describing, Mr. Poole, and maybe that Mr. Crichton has explained with reference to Canada.

If our air traffic control system is commercialized, how would you insure that large carriers do not overshadow other smaller stakeholders such as General Aviation, General Aviation pilots, small carriers and smaller airports? How are you doing that, or is that not a problem in Canada?

Mr. CRICHTON. No, we are doing it. And it is a combination of the provisions that were set out in our enabling legislation to enable a transaction. There are certain provisions there regarding level of service requirements, charging principles, and also within our own corporate governance documents in terms of our corporate by-laws, there is a balance to approach. The air carrier representa-

tives on the board do not constitute a majority, number one, but GA does have a seat on the board as well. So it is the combined effect of all of those issues looks after that concern, and it has not been a concern for us.

Senator DOMENICI. Thank you very much.

Senator Lautenberg.

Senator LAUTENBERG. I will just be here a couple of minutes, Mr. Chairman. That is my intent anyway.

I wanted to just get something kind of clear, because the non-profit—you describe as non-shareholder, Mr. Crichton, that NAV Canada has—and I wonder, what is the incentive to keep going and to keep this business intact? There is some ownership someplace here. Who owns the NAV Canada?

Mr. CRICHTON. Quite frankly, if you are thinking of ownership in a traditional sense, Senator, nobody.

Senator LAUTENBERG. Well, I mean in——

Mr. CRICHTON. There are not any shares in that sense. The four members, as I described them earlier, are, I suppose, the surrogate shareholders, but the incentive is largely in the fact that the customers who are paying all the bills have a significant role in the governance of the company in terms of sitting on the board, and that provides the incentive to be efficient, and to produce a good product, to be safe and so on.

Senator LAUTENBERG. They pay competitive executive wages?

Mr. CRICHTON. Yes.

Senator LAUTENBERG. So these are careers that people want to pursue, and will, I guess, be held to a standard of efficiency, productivity results that we would normally see in the corporate world?

Mr. CRICHTON. Absolutely.

Senator LAUTENBERG. And so it is, if not directly customer-held shares, customer owned, they are a large part of the council, the board, whatever, and they are the ones who set the need, and is it the board that finally judges whether or not this particular program, this particular investment is going to be put in place?

Mr. CRICHTON. Yes, they do, although I must say that when it comes to the establishment of user fees, when it comes to major capital programs or system improvements, that the directors on the board tend to defer quite a bit to the airline or the GA people, the people in terms of their judgment, and I think that is quite normal.

Senator LAUTENBERG. You have to get a consensus of course.

Mr. CRICHTON. Yes; and we certainly, when we are doing any kinds of program, we consult with our customers constantly, including with respect to capital programs, and we have found that that pays off, because quite frequently they will point out some programs that they see very little value added to them, but they have other ones that they think would help them a lot, and a lot of our time is spent, in fact, in trying to figure out how to save the airlines' money from an operating cost point of view.

Senator LAUTENBERG. Do you hear from the customers' customers?

Mr. CRICHTON. Not a lot.

Senator LAUTENBERG. Well, who does?

Mr. CRICHTON. The airlines certainly do.

Senator LAUTENBERG. And you are assured that they pass those criticisms along to you?

Mr. CRICHTON. The—I think the average passenger, at least in Canada, does not really notice the air traffic control system.

Senator LAUTENBERG. Well, you are talking about the management of the system programs to be put in place. Does it substitute for the structure that we might have here, except for the safety side of things? Does your structure substitute for that?

Mr. CRICHTON. We provide the entire air navigation service, which includes, obviously, the air traffic control portion.

Senator LAUTENBERG. Right. But if there are delays, do you hear it from the airlines? Does anybody collect passenger opinion?

Mr. CRICHTON. The whole issue of delays becomes a technical one and a complex one of trying to establish in any given circumstance what induced the delays. Certainly if you are looking at it from a passenger's point of view, unless they were told specifically, they would not know the delay was an ATC-induced delay, and I have heard pilots get on the PA and announce delays into Toronto or something due to ATC problems, when in fact the reason the delays were there was there was a huge thunderstorm right over the airport. So we have to get clear on the terms on what really caused the delay. We do cause some delays. We are not perfect. Most of them have been due to a staffing problem. We are fixing that. But in Canada at least, the ATC-induced delays are relatively small.

Senator LAUTENBERG. Well, I am curious about what influence NAV Canada has on passenger questions. Is your activity focused exclusively on the navigation and the controller side of things?

Mr. CRICHTON. Yes, sir. Unlike the FAA, we have no role in air safety, other than our obligation to run the ANS. So that is still—Transport Canada does all of that, looks after the regulation of us, of the airlines, and certification of aeronautical products and so on.

Senator LAUTENBERG. So it is specifically parceled out.

Mr. CRICHTON. Yes.

Senator LAUTENBERG. I am curious as to how you were able to drop your service charges to users by over 30 percent. What did you find—you, Mr. Poole, what do you find is the hindrance to shrinking down costs? I mean our people work very hard. There is a lot of stress. There is overtime required, and I talk to controllers regularly. I go up in the towers and sometimes I sit in the second seat in a small airplane. And I go up and I ask them what their attitude is and see how they operate. I almost fainted when I first went up there and I saw that they had little paper slips that they were passing back and forth. And it is incredible to me, and I must say, whether it is Canada or the United States, how well the system operates. When you look at the number of movements that take place every day, Mr. Baker, the number of people that are carried, and thank the Lord so few incidents that have the kind of tragic result we have just witnesses, so few compared to the amount of effort and the amount of activity that takes place. I think it is miraculous and I think it is a real testimonial not only to the equipment, but rather to the personnel that man it. They do one terrific job. And, yes, when mistakes are made, they are often

caught and there is backup redundancy that takes care of the fact that we do not have a major collapse in the system.

But how do you get these costs down like that? I come out of the corporate world. I ran a big and very efficient company I think, yes. The stockholders always thought so. What is it that—what is the factor or couple of factors that—it has to be some single thing, it cannot be a whole series of little things; it has to be a major, major thing.

Mr. CRICHTON. Well, just briefly, Senator, in our case it was the application of normal commercial business practices to the system, and as I said in my remarks, we reduced the work force by nearly 20 percent, and that was almost exclusively in the administrative and overhead area, and we found the system, when we took it over, was fairly bureaucratic, was—there was a great deal of redundancy in the system in terms of people in different regional offices, for instance, throughout the country, where really a business would centralize a lot of those functions and so on. So we spent a lot of time on that, and also in terms of—just bringing into play normal commercial practices with respect to purchasing and so on and so forth. So that is how we have done it, and we baselined those costs and got it down.

Mr. BAKER. I think in our experience, looking at air traffic control corporations in a number of countries, two things seemed to stand out. One is the kind of administrative streamlining that Mr. Crichton just talked about, of really making an organization with fewer layers, and in very few cases are there reductions in number of actual controllers or technicians. It is much more the administrative overhead that can be cut significantly.

Second is a less complex procurement process with a greater willingness in selected cases of adapting off-the-shelf equipment and systems, rather than in-house doing a great deal of what you might call over-specifying to come up with unique products specifically for this job. Sometimes that is necessary, but not always, apparently, not to the degree that it is common within the FAA today.

Senator LAUTENBERG. Mr. Baker, your company is one of the bigger and better companies in the aviation business. You know that your operation is very much dependent on the effective use of a national resource, whether that is airspace, whether it is airports, the infrastructure that goes along with it, even things like transportation to and from the airports, all of these things have an effect on the way your business operates.

Now, one of the things that I am sure you have heard talked about a lot recently is the unlocking, so to speak, of the trust funds. Now, do air carriers believe that they have not gotten their money back from their contributions to the trust fund?

Mr. BAKER. I think the airlines are less able to have a view, and my company, in particular, as to how to fund what needs to be done, but we clearly can articulate what needs to be done and how that has to proceed. The trust fund is one of several alternative vehicles that can bring the money to the people who have to do the work. The airlines' view has consistently been that we need to get on with it, and that it is expensive, but we do not see many alternative approaches to solving the problem. Clearly the trust fund is another way in which money comes from our customers' pockets

into the process. If airlines, for instance, were charged on some kind of a user fee or direct basis, that is an indirect way of getting money from the ultimate passenger, because that would be reflected in our fares. So how we choose to do that process, the airlines have less of a concern than the fact that we eventually show up with the right amount of money at the right time to get the job done.

Senator LAUTENBERG. Now, because I pointed out in my opening statement that we appropriated roughly $65 billion more for aviation since the development of the Airport Airways Trust Fund than has been collected into the trust fund, $65 billion more. So it is a condition that looks like it has been well handled. I think hearing what we have heard today, both from Administrator Garvey, from the Inspector General, and our friends at the table with you now, that things are improving, and it has been catch-up. Believe me, when I came down here in 1982, I came out of the computer business. I ran a big company. It has 35,000—37,000 employees today, and it is a company I started with two other people, computer business. We celebrated our 50th anniversary last year and I was the oldest of the three, and I hope that my condition suggests that I have been able to work all of those years without showing excessive wear and tear.

But the fact of the matter is, that equipment that we abandoned way before I got here was the principal equipment used by the FAA. I was frightened by it, to see that we are so antiquated in a place that has such a hold or a control on safety, on scheduling, et cetera, but we have worked our way through getting better. The pace is slower than we would like to see. Very frankly, I speak for myself, and I think probably the airlines feel that way. Certainly Mr. Mead is still here, and I know that he has expressed interest in moving the process. That is what we would like to do.

Mr. BAKER. Senator, I would offer one comment, that when the Administrator flew on New Year's Eve—on American, I might add—through Dallas/Ft. Worth to San Francisco, I remarked to her, when she arrived in Dallas/Ft. Worth, that it is very interesting to note that when there is an immovable deadline, as a country we get things done.

Senator LAUTENBERG. Well, when it looks like the world is going to come apart if you do not, it sure does get finished.

Mr. BAKER. And the same thing happens in the corporate world. You cannot take slippages when you cannot move the deadline, and the same thing applies in public or the private sector.

Senator LAUTENBERG. We do have movable goal posts here, and it happens because—one of the reasons, I think, is because of the erratic nature of the funding mechanism, but that does not mean that we can just go ahead and put everything that we have in aviation—you folks could not handle it if we suddenly shut down the railroads or what-have-you. Imagine 10,000 more flights a year from Boston to down here, the northeast corridor, if we shut down Amtrak. It would—it is a shot that would be heard around the world. And we cannot afford to do that. And I just want to make sure that it is clearly understood that we appropriate a heck of a lot more into the fund, and we do it on a need basis. We do not do it on a mandatory basis, because there are favorites that various

chairmen might have, and you would see something come out of an area, a modular area in an efficient transportation system that could triple one area at the expense of another, and that just would not do us any good. You could not fly all the places where people need them.

So the—I am reminded of a question, Mr. Baker, about the airlines and how they feel about Air 21. Are you folks endorsing the Air 21 concept that has been——

Mr. BAKER. I think we endorse it as one possible way to deal with the problem, but not the only, and we urge that all of the respective views on how to do it come together quickly, and we get on with the funding.

Senator LAUTENBERG. Yes; I think you run a risk here, and that is, though you suggest that you are really are kind of flexible and do not have much of an opinion, an endorsement of that proposition is one that is going to, I think, meet an enormous amount of tension here, because that little exercise I just went through, if you take it to the planes and you leave out the trains, or you leave out the cars, I think you would see us one lopsided nation with lots of people not being able to get where they want to go, and one does not have to live in Washington, DC to know that the highways are crowded beyond their capacity to handle them. We have to have high-speed rail. We have to have things that will permit aviation to become even more efficient than it has incredibly been.

ADDITIONAL COMMITTEE QUESTIONS

Listen, thank you all for your testimony. We will take the opportunity to submit questions in writing, would ask for a prompt response, and Mr. Crichton, Mr. Poole, Mr. Baker, thank you very much.

[The following questions were not asked at the hearing, but were submitted to the nondepartmental witnesses for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO MR. POOLE

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

TECHNOLOGY, CURRENT SYSTEM, AND WORLD TREND

Question. Mr. Poole, you have been involved in transportation studies for a long time and particularly have focused on the U.S. Air Traffic Control System.

Do you believe the United States current Air Traffic Control System structure is sufficiently agile to keep pace with rapidly changing technology and sufficiently responsive to customer needs to ensure a modernized system?

Answer. No, the present U.S. ATC System is falling further and further behind today's rapidly moving electronics, computer, and satellite technology. It is also not, in actual practice, a customer-driven organization. Otherwise (for example), it would not have wasted a billion dollars on the now-abandoned Microwave Landing System that its users did not want. I do not believe the ATC System will be customer-driven until the customers are directly paying its bills—by means of payments for ATC services paid directly to the provider organization.

Question. In terms of global trends, would you say that our Air Traffic Control System is out-of-step with the direction many other countries seem to be taking to enhance system efficiency while preserving the highest level of safety?

Answer. Yes, the United States is definitely behind the curve. There are now at least 16 countries with a commercialized corporate organization for air traffic control, with direct user charges providing all or nearly all of these corporations' revenue. Such countries include Australia, Britain, Canada, Germany, New Zealand, Switzerland, and South Africa. These countries are modernizing more quickly and

at lower cost, their airline delays are being reduced (while ours are increasing), and their unit costs of providing ATC services are also coming down, resulting in lower fees to the users. Ten years ago this was mostly a matter of theory; today, it is a matter of fact.

BEST STRUCTURE FOR THE UNITED STATES

Question. Mr. Poole, you have done a tremendous amount of work and have studied how other countries have responded the similar problems in their Air Traffic Control System and modernization programs.

Of the structures you have studied, which one would be the best "fit" for the United States?

Answer. Our assessment is that the model adopted by Canada—of a not-for-profit corporation, funded by user fees and charges, and controlled by a board representing all principal stakeholders—is the best model to adapt for the United States.

Question. What are the major barriers to a structural change that you propose?

Answer. There is understandable attachment to the status quo by those operating the present system within the FAA and those in Congress responsible for oversight of its operations. Based on the overseas experience, we think ATC commercialization can be a positive change for most of the current staff, who should be considered part of the team that works out the details of the new system. And Congress will still have important oversight functions vis-a-vis DOT and FAA, especially regarding safety regulation of the new system.

The other main concerns arise from some segments of the airline industry and from much of the general aviation community. Both fear serious economic harm if they are faced with user fees that are significantly higher than what they currently pay in aviation user taxes. These concerns must be taken very seriously in developing the principles for ATC fees and charges—and are being given detailed attention in the work that my organization is currently carrying out.

COMPARISON OF AVIATION IN THE UNITED STATES AND CANADA

Question. Mr. Poole, some have argued that too many differences exist between the U.S. Air System and the Canadian Air System. They have stated that because of these differences, commercialization is not the best "fit" for the United States and would not translate into the same success as was experienced in Canada. I understand that the Canadian System is between one-fifth and one-eighth as large as the U.S. Air Traffic Control System.

Please compare the systems. What are the major differences between the United States and Canada?

Answer. The United States has 5 times as many aircraft movements, 3.2 times as many commercial aircraft, and 8.4 times as many general aviation aircraft as Canada. The countries are approximately equal in area, but most of Canada's population is in its major cities, near its southern border with the United States, while the U.S. population and its major cities are far more geographically dispersed.

Question. Given these differences, how do you respond to those who make this argument?

Answer. The larger overall amounts of U.S. aviation activity would, of course, make this the largest ATC commercialization ever undertaken. But mere size does not argue against the idea's feasibility. The satellite-based Future Air Navigation System (FANS) technology—based on GPS plus airborne data-link plus space and ground-based augmentation (such as LAAS and WAAS)—will provide huge increases in ATC capacity. The transition to this new technology is likely to be much smoother and done more cost-effectively by a customer-responsive organization of the kind we are proposing than by the FAA in its current form.

In terms of managing complex air space, what counts is not the overall numbers but the density and complexity of air traffic. Germany (whose system has been corporatized for 7 years) has some of the world's most dense air traffic—yet its ATC corporation is handling it better than the former government agency did.

The most relevent difference between the United States and Canada is the much larger size of general aviation here, as a proportion of total aviation activity. Clearly, a commercialized system must deal realistically with this large and important set of players. Our ATC corporation proposal will present what we believe to be a fair deal for general aviation.

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

Question. Mr. Poole, you are an advocate of privatization. In your opinion, what are the major areas that we need to be concerned with if Congress decides to privatize the Air Traffic Control System?

Answer. Actually, when it comes to air traffic control, what I'm recommending is better described as corporatization or commercialization, since I do not think the system should be sold to or operated by a for-profit company. Rather, I recommend that we follow Canada's example and create a not-for-profit stakeholder-controlled corporation, funded directly by fees and charges paid by aviation users.

In that context, it is vital to structure the corporation so that all stakeholders are fairly represented in the decision-making, especially regarding fees and charges. It is also very important to make clear to the public that air safety will be strengthened, by putting the ATC provider (the new corporation) at arms-length from the safety regulator (the FAA), just as the airlines, general aviation, and the airframe manufacturers are all at arms-length from the safety regulator. This is seen as one of the important benefits of ATC corporatization in other countries.

Question. Mr. Poole, what are the major arguments for and against commercializing the Air Traffic Control System?

Answer. The major arguments in favor of commercialization are as follows:

1. To change the corporate culture of the ATC provider to one that is highly motivated to respond to user needs, because it is paid directly by its users for services provided.

2. To provide a dependable source of funding for both operations and ongoing modernization, via fees and charges that can support the issuance of revenue bonds.

3. To free the corporation from the remaining constraints of Federal personnel and procurement regulations, so that it is free to operate like other high-tech service businesses.

4. To remove the conflict of interest inherent in the FAA's current dual role as both ATC service provider and aviation safety regulator—thereby enhancing aviation safety.

The major arguments against appear to be:

1. The system should be run as a public service, not to make a profit. (But this objection is not relevant to a not-for-profit corporation like NAV Canada, which is what I am recommending.)

2. A commercialized system might pay less and employ fewer controllers. (In fact, the evidence suggests that corporatized systems tend to pay more (they pay whatever they need to, to obtain the best people for each position, especially for top management). On the other hand, it is likely that advanced technology will inevitably make ATC less labor-intensive, so the work force will shrink over time whether or not ATC is commercialized.)

3. A commercialized system might be dominated by the interests of major airlines, putting low-fare carriers and general aviation at risk. (This is why a stakeholder board governance structure is so critical to the design of the new system; it must serve the interests of all stakeholders.)

4. A commercialized system might jeopardize air safety. (I believe this to be the weakest argument against ATC commercialization. This change should strengthen air safety for three reasons: (1) It puts the safety regulator at arms-length from the service provider, ending today's inherent conflict-of-interest, (2) It facilitates a more-rapid shift to newer and better technology, which will make operations safer, and (3) The private liability insurers of the ATC corporation will provide an additional layer of safety oversight, besides that provided by the FAA.)

Question. Mr. Poole, if our Air Traffic Control System is commercialized, how would you ensure that large commercial air carriers do not over-shadow other smaller stakeholders, such as general aviation pilots, small carriers, and smaller airports?

Answer. The key ingredient is a carefully balanced stakeholder board, analogous to the board now governing NAV Canada. Our current draft proposal calls for a 15-member board, with 4 seats for various airline interests, 2 seats for general aviation interests, one representing airports, one representing ATC employees, and 2 representing the Federal Government (DOD and DOT). These 10 would select the CEO, and those 11 would select four independent, at-large directors.

Question. Mr. Poole, privatization is difficult to forward as an alternative management structure if we wait for all the interested parties: the Administration, the controllers, the airlines, General Aviation, Congress, and the flying public to agree on the specific details of the structure, isn't it?

Answer. Is it better to try to incrementally privatize like Mr. Mead suggests or to follow the United Kingdom's model where the decision is made to privatize, consistent with broad principles, and let the interested parties hammer out the details?

ATC commercialization was a user-led reform in Canada. I think we are moving toward airline-industry consensus on the general approach, and there seems to be parallel interest within the Adminstration (at least to the extent of something like their 1994–95 USATS Federal corporation proposal). Once a serious proposal is on the table with strong industry support, I believe that other stakeholders (primarily general aviation groups and employees) will be willing to negotiate what they consider to be a reasonable deal that protects their interests within that framework. But I agree that it is not necessary for Congress to decide on all the details. Better to enact a good, solid framework of principles and let the stakeholders work out the details.

QUESTIONS SUBMITTED TO MR. CRICHTON

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

SAFETY

Question. Mr. Crichton, some have expressed concern about commercializing air traffic control primarily because they fear that safety would be compromised.

Based on your experience at NAV Canada, has safety increased, decreased, or remained the same since NAV Canada was established?

Answer. We believe the level of safety has increased. One measure is the significant reduction in the rate of operating irregularities per 100,000 flights that we have achieved.

In addition, the privatization has separated the service provider (NAV Canada) from the safety regulator (Transport Canada), whereas previously the service provider and the safety regulator were the same entity. An inherent structural conflict of interest has been removed and Transport Canada now conducts a robust safety oversight role to a degree which they never did before.

In addition, management at all levels in NAV Canada have a portion of their compensation linked to maintaining and enhancing safety levels.

NAV CANADA USER FEES STRUCTURE

Question. Mr. Crichton, some air traffic control users and stakeholders groups in the United States are wary of user charges. I understand that Canada's major aviation stakeholder groups were able to agree on a user fee structure.

Please describe NAV Canada's user fee structure. On what basis are they charged?

Answer. Large commercial air carriers pay movement based fees related to aircraft weight and distance flown. Smaller commercial air carriers have a choice of paying movement based fees or daily charges which have a cap. Small general aviation aircraft usually pay a flat annual fee related to the weight of the aircraft.

There are numerous categories and details too numerous to list here, but which can be accessed on our web site at www.navcanada.ca or through our Customer Guide to Charges which is being sent to you via courier.

Question. Who pays user fees and are any users exempted from charges, such as the military?

Answer. Some exemptions from air navigation services charges are provided for certain categories of flights. These are listed below:

—Gliders, ultralights and balloons;
—All aircraft weighing less that 600 kg (1,323 pounds);
—Aircraft or flights dedicated to search and rescue operated under the direction of police or the Department of National Defense;
—Aircraft or flights dedicated to firefighting and related operational training;
—Domestic U.S. flights which over fly Canadian airspace;
—Aircraft or flights dedicated to air ambulance operations paid by government;
—Test flights performed exclusively for the following purposes: Testing aircraft following overhauls, modifications, repairs and inspections for which a certificate of compliance is to be given; or Enabling aircraft to qualify for the issue or renewal of a certificate of airworthiness;
—Flights aborted (not reaching their next destination and returning to the point of flight departure) due to weather conditions;
—Flights taking part in air shows;
—Flights operated exclusively for a registered charity as defined in the Income Tax Act (Canada) or equivalent foreign statute;
—State aircraft of a foreign country, unless charging has been authorized by an Order-in-Council; and

—Aircraft or flights operated under the authority of the Minister of National Defense.

Question. What kind of appeal process exists regarding Nav Canada's fees and charges?

Answer. Fees and charges may be appealed by a user to the Canadian Transportation Agency if a user believes the fees and charges violate one or more of the charging principles set out in the Civil Air Navigation Services Commercialization Act or on the grounds that NAV Canada failed to abide by the notice provisions in the Act. The relevant sections of the Act are 32 through 54 inclusive. We will forward to you by courier a copy of the Act.

Question. Did Canada eliminate specific taxes to compensate for the new user fees?

Answer. Yes; while in government, the ANS was largely financed through the proceeds of the Air Transportation Tax on tickets issued to passengers for flights which originated or terminated in Canada. This tax had a maximum cap of $55 per ticket and was repealed in two stages as NAV Canada phased in its user fees. This tax was totally repealed in November 1998.

SUCCESSES OF NAV CANADA

Question. Mr. Crichton, I understand that NAV Canada has improved air traffic control efficiently, developed cutting edge technological solutions to air traffic control challenges, increased controller productivity and lowered the cost to system users by more than 30 percent.

In you opinion, would this impressive set of accomplishments be possible if the government were directly involved in the day-to-day operation of NAV Canada?

Answer. No, most of these achievements would not have been possible and the government recognized this as one of their motivating factors in pursuing the privatization. The government realized that its structure related to personnel policies, procurement, capital program management and customer responsiveness was ill suited to what amounted to the provision of a complex commercial service in a fast paced, commercial market place.

PROSPECT OF THE NAV CANADA MODEL IN THE UNITED STATES

Question. Mr. Crichton, NAV Canada clearly has impressive results. Your organization has lowered capital expenditures while improving efficiency and air side capacity.

In you opinion, would the NAV Canada model be successful in the United States?

Answer. In my opinion it would be. The NAV Canada model elegantly balances the vital interests of all ANS stakeholders.

Question. The government retains its main public interest preoccupation to oversee safety while at the same time receiving a substantial sum of money for the assets while shedding any ongoing financial liability. The commercial airlines obtain a low cost, customer driven private sector corporation in which they participate at the Board of Directors level. General Aviation obtains service guarantees, reasonable costs and a seat at the Board table. The ANS unions also receive Board representation and formal recognition of their vital role.

What are the main difference between the United States and Canada that would make it more difficult to adopt a model like NAV Canada?

Answer. I believe the main differences, between the United States and Canadian ANS's are quantitative rather than qualitative. The United States is the largest ANS in the world and Canada is number two. Proper commercial management principles will work in both cases. Some other differences are the attitude of general aviation and organized labour. However, I think their concerns are capable of being addressed as we did in Canada provided the political will is there along with some industry leadership.

ACCESS TO SMALL AND RURAL COMMUNITIES

Question. Mr. Crichton, as you know, New Mexico has many small and rural communities. Air service is very important to these communities, and contributes to their economic well-being.

Do any protections exist either in the NAV Canada legislation or operating procedures pertaining to air access to small or rural communities? If so, please describe the protections.

Answer. Yes; the legislation contains specific protections for northern and remote communities. These protections are contained in sections 18 through 22. In effect these communities are given a veto over reductions in service levels which can only be overridden by the Federal Minister of Transport.

Question. Has NAV Canada identified any air traffic services where the costs far exceed the returns?

Yes; and they generally fall into the category of services provided to remote communities and general aviation. However, these tradeoffs have been accepted by most stakeholders as reasonable in the context of operating a national ANS in a country as large and diverse as Canada.

Question. Has NAV Canada discontinued air service in a rural community?

Answer. No; we have, however, adjusted the method of service delivery in some communities without materially affecting the level of service.

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

Question. Mr. Crichton, the FAA has had difficulty increasing air traffic controller productivity, yet NAV Canada has increased productivity by about 20 percent. Why have you been so successful in this area while FAA has had so much difficulty?

Answer. I cannot comment on the FAA situation as I am not familiar with their specific issues. NAV Canada's approach with our controllers' union was to offer significant wage increases provided there were substantial quid pro quo's in work rule changes to enhance productivity in a real and measurable sense. These goals were attained through long, intensive, hard bargaining. It was not easy and management had to stand its ground in spite of intense pressure—in this we had the full support of our Board of Directors and ultimately the Federal Government, who was prepared to intervene in the event of a strike.

Question. Mr. Crichton, recent concerns about increases in delays and cancellations and customer dissatisfaction with airline service in the United States has fueled debate about the need to restructure or commercialize its air traffic control system. What impact has privatization had on airline delays and safety in Canada?

Answer. Since NAV Canada took over, delays attributable to ATC have been gradually reduced. This has been accomplished through a variety of means:

—Increased controller staffing levels to fill chronic shortages inherited from government;

—Increased customer collaboration in decision making;

—Increased focus on quickly introducing proven, automated systems and procedures that expedite traffic flows; and

—Enhancement of Safety under NAV Canada.

QUESTION SUBMITTED BY SENATOR CHARLES E. GRASSLEY

Question. Mr. Crichton, I understand that each Federal employee working for NAV Canada received a one-time payment of approximately $14,000 U.S. dollars. Who bore the cost of that payment, NAV Canada or the government? Do you feel such separation pay was critical to the success of NAV Canada?

Answer. The background behind this payment is that it was a contractual obligation of the Federal Government to its employees. Many years ago the Federal Government agreed to a severance arrangement whereby if any Federal employee ceased to be a Federal public servant, they would be paid a one-time severance equal to 1 week's salary for each year of service up to a maximum number of weeks.

This was simply a contractual obligation that was triggered by the privatization. There were two choices. The government could pay the employees directly in cash on transfer to NAV Canada, or pay the accrued liability to NAV Canada as a closing adjustment with NAV Canada becoming liable to make the payment to individuals when they eventually left NAV Canada. It was the preference of employees to receive the money in cash when they transferred over and the government agreed to this.

I do not believe that this situation had any effect on NAV Canada, as it was a longstanding legal obligation pertaining to the government to which NAV Canada was not a party and it was seen as such. On the other hand, if the Federal Government had tried to back away from this obligation, the employees would have no doubt sought legal redress and this would have adversely affected moral. Happily, this did not happen.

SUBCOMMITTEE RECESS

Senator DOMENICI. We stand in recess.

[Whereupon, at 12:56 p.m., Thursday, February 3, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

THURSDAY, FEBRUARY 10, 2000

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:08 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Richard C. Shelby (chairman) presiding.

Present: Senators Shelby, Specter, Bond, Bennett, Campbell, Stevens, Lautenberg, Byrd, Kohl, and Murray.

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE SECRETARY

STATEMENT OF RODNEY E. SLATER, SECRETARY OF TRANSPORTATION

OPENING REMARKS

Senator SHELBY. The committee will come to order.

Mr. Secretary, we welcome you, again, to the committee.

Secretary SLATER. Thank you, Mr. Chairman.

Senator SHELBY. You have been here many times. We have worked with you on many, many issues.

My colleague, Senator Lautenberg, who is the ranking Democrat on the Budget Committee, has to go to the budget hearings. And I am going to defer to him at this time for the first opening statement, and then I will pick it up.

Senator LAUTENBERG. Okay.

Senator SHELBY. Senator Lautenberg.

STATEMENT OF SENATOR FRANK LAUTENBERG

Senator LAUTENBERG. That is very kind, Mr. Chairman. I thank my colleagues, as well, for indulging me for just these few minutes.

I wanted to be here to welcome Secretary Slater and his staff to our hearing this morning as we review the President's budget request for the Department of Transportation for fiscal 2001.

With this budget, the Administration has shown that transportation should be and will be a priority, even as overall Federal spending is held down to reasonable limits. The President's request for the DOT of just under $55 billion represents a 9.4 percent increase above the level enacted for the current fiscal year.

And I think it is important to point out that if we are successful in matching the Administration's request in the 2001 appropriations bill, overall Department of Transportation funding will have risen more than $12.4 billion or almost 30 percent since my friend, Senator Shelby, took the reins of this subcommittee.

Last week, during our joint hearing with the Budget Committee on the topic of aviation finance, I emphasized that an appropriate balance must be maintained when we invest in improvements to our national transportation enterprise.

The Administration's budget for the fiscal year 2001, I believe, reflects that balance. And I am very pleased to see the sizable increases requested for both the FAA and the Coast Guard's operating budget. Both of these agencies have been stretched to the max. The FAA has some new equipment coming online that must be installed and maintained.

The Coast Guard, according to the Commandant, Admiral Loy, has exhausted itself fighting the war on drugs in the Caribbean, interrupting illegal immigration, addressing the critical domestic missions here at home. I had the opportunity, over these past few weeks, to be down at the South Pole and to watch one of our Coast Guard icebreakers do its job; monotonous and exhausting, hard, but it is essential. Wherever you see the hand of the United States extended, it always seems to carry a Coast Guard implication with it.

So, I am pleased to see these rather healthy increases that will allow these agencies to operate at full capacity and at full effectiveness.

MASS TRANSIT

And as we turn our attention to the infrastructure programs, here, again, the Administration has maintained its commitment as to balance between all modes of transportation. The Federal Transit Administration is slated to receive a 9 percent increase. It is welcome news, frankly, to a Senator from the most densely populated state in the nation.

Specifically, in my State, they have requested $121 million for the Hudson-Bergen light rail system and $10 million for the Newark-Elizabeth rail link. And perhaps, most importantly, this budget also formerly signals the Administration's intention to sign a full funding grant agreement for Phase II of the Hudson-Bergen light rail system. Once completed, Phase II of the system will realize a long-awaited goal; giving 100,000 riders a day improved access between our major cities in northern New Jersey and ultimately to the marketplace in New York City.

While I know that some of the funding sources for the Administration's new initiatives might be controversial, I want to commend the Administration's drive to get more productivity out of our transportation system. In this day and age, we must carefully consider the environmental impacts of our transportation improvements, and we must also face the fact that we are constrained, not only in the availability of unused right-of-way, but also the availability of funds.

We must make aggressive efforts to get more out of our existing transportation infrastructure. That means getting more produc-

tivity out of our highway system. And the President's proposed $140 million increase in the Intelligent Transportation Systems, a boost of 143 percent, is intended to do just that. So is the President's proposal to use $468 million for a new high-speed rail initiative.

HIGH-SPEED RAIL

I am pleased that we are finally making some progress on the issue of high-speed rail. Our transportation infrastructure is bursting at the seams from overuse. And our ability to build new roads and airports is limited. We just don't have the space in many of the areas of the country.

At the same time, our rail infrastructure suffers from serious under investment and remains a largely untapped resource. While we have almost tripled our Federal investment in highways and aviation, over the past 20 years, investment in our national passenger rail system is actually 50 percent lower than it was 20 years ago.

If we are to maintain a balanced transportation system capable of dealing with increasing travel demands, then we must reverse this trend and begin matching our investments in highways and aviation with serious investments in our rail infrastructure.

That is why I introduced the High-Speed Rail Investment Act last fall. This legislation uses innovative financing to provide $10 billion in capital funds for the development of high-speed rail corridors across the nation over the next 10 years. We currently have a bipartisan group of 32 cosponsors in the Senate, and companion House legislation will be introduced by a bipartisan group led by Congressman Oberstar and Congressman Houghton.

Mr. Secretary, I hope that we will be able to work together to provide a secure and long-term funding source for the development of high-speed rail corridors across the country.

AMTRAK

On the subject of passenger rail, Mr. Chairman, I have got to express my concern over the fact that our current hearing schedule allows no opportunity for Amtrak to testify before the subcommittee this year. When you add together the Administration's high-speed rail initiative and Amtrak's core budget request, we have a pending budget request before the subcommittee for intercity passenger rail of almost $1 billion.

Now, I think we have a responsibility to hear from Amtrak on this request. And I would hope that we could find time on the schedule to do that. I note that on March 2, you have scheduled a hearing on the implementation of the Driver's Privacy Protection Act, and I am pleased that we are going to have that hearing, but I believe that if we are going to set aside a spot to have a hearing that is authorizing in nature, we ought to also take the time to have a hearing on Amtrak, Mr. Chairman. I hope that we will be able to do that.

I want to thank you for the courtesy extended. And once again, I thank the Secretary and this whole team. They work hard at the job. We do not always give them the resources that are necessary

to do the job, but they do very well with what they get. And I hope that we will continue to be able to support them, as needed.

Thank you.

OPENING STATEMENT OF SENATOR RICHARD SHELBY

Senator SHELBY. Thank you. Mr. Secretary, I will try to be as brief as I can. We have a lot of people here today.

I must admit, however, that this is the most creative budget that I have seen since becoming chairman of the subcommittee. At first blush, it appears that the President's budget increases Federal spending on transportation by nearly $5 billion, but on a closer inspection of this budget, the Administration clearly is taking credit for numbers that were set by TEA–21, additional funds which became available because of higher than anticipated gas tax revenues, and spending financed by new user tax increases that the Congress has already rejected. In the end, this is barely a current services budget.

USER FEES

Mr. Secretary, the President's budget request is not only misleading, I think it is dangerous. It assumes that new user fees for aviation, rail safety inspections, marine navigation aids, and hazardous materials will offset $1.3 billion of this budget's costs. The proposals have been submitted to Congress each year that I have been chairman of the subcommittee, and each year, Mr. Secretary, I have told you that Congress is not interested in enacting new user taxes increases on the transportation community. Perhaps it is time to adopt, Mr. Secretary, a "three-strikes-and-you're-out" law for budget gimmicks.

REVENUE ALIGNED BUDGET AUTHORITY

Also, this budget includes proposals to divert highway gas tax revenues to other activities, such as passenger rail, highway safety programs, and motor carrier inspections. These may be popular programs which merit our consideration for funding, but I can assure you that proposals to fund these types of programs with gas tax revenues are as dead on arrival in the Senate as new user fees.

The widespread practice of transferring funds in this budget is largely the result of the budgetary firewalls on certain transportation accounts. Considering the excessive movement of funds, I fail to understand, Mr. Secretary, why I would read press reports indicating that you are willing to support an aviation firewall.

This would only exacerbate the conditions that forced you to resort to gimmicks in the first place and would further tie your hands in managing all the transportation programs for which you, as Secretary, have the responsibility.

The President's budget request is not only misleading, it is irresponsible. It raises expectations of various user groups and interested parties, while both of us know that neither you nor I can deliver on the empty promises it makes to diverting highway dollars to non-highway accounts or activities offset by new user tax fees.

I think we may need to look for a mechanism that requires the Department to present a budget that internally offsets any spend-

ing which requires shifting resources out of a protected budgetary account to a non-eligible transportation account or which is funded by new user fees that the Department doesn't even have the cost accounting system in place to implement.

Other than that, Mr. Secretary, it is great to see you. You are always welcome here. I have certainly enjoyed working with you. And once we get past this, we will get down to other things.

Secretary SLATER. Thank you, sir.

Senator SHELBY. Senator Byrd.

STATEMENT OF SENATOR ROBERT C. BYRD

Senator BYRD. Mr. Chairman, thank you.

TEA–21

A healthy national transportation system is a vital component of a prosperous future. TEA–21, as it is known, was a great legislative accomplishment of the last Congress, and one in which I was deeply involved, as the Secretary is well aware.

A key feature of TEA–21 is that it placed into law a mechanism to ensure that all funds deposited into the highway account of our Highway Trust Fund will be spent on the purposes for which they are collected; namely, the construction and restoration of our nation's highways. In doing so, TEA–21 re-established the trust in the Highway Trust Fund.

TEA–21, like any major piece of legislation, represented a compromise between many different regional interests and differing policy positions held by members of the House of Representatives, the Senate, and the Administration.

I do not attend many signing ceremonies, but I did attend the signing ceremony for TEA–21. It was the only signing ceremony I have attended, I suppose, in many years. And I can tell you that on that day, there were not any "nay sayers" to be found in this town to tell the President that he should not sign it. Everybody had already made their compromise. That is grammatically incorrect. Everyone had already made his or her compromise. Everyone had something to be proud of in that bill.

EMERGENCY RELIEF

Even so, the Administration is now proposing a number of major changes to TEA–21. Perhaps the most destructive of these proposals is the Administration's plan to take a portion of the highway funding provided in TEA–21 away from all 50 States, in order to address a backlog of emergency relief applications.

Every year, in the past, when the cost of these applications has exceeded the funds available, Administrations—be they Republican or Democratic—have submitted requests for emergency appropriations. Without exception, Congress has always provided the necessary emergency relief appropriations. But, in the last 2 years, a new pattern has emerged.

This Administration has knowingly allowed the amount of unfunded applications for emergency relief to grow to more than $600 million. And now, rather than request these funds as an emergency supplemental appropriation, the Administration, instead, is pro-

posing to address the bulk of the backlog by diverting some $400 million from the highway funding allocated to the States under TEA–21.

This new approach is particularly perplexing when one looks at the fiscal year 2000 emergency appropriations the Administration is requesting. Among them, the almost $1 billion requested to assist Colombia in its drug war.

Appropriately, roughly $250 million in emergency assistance is being requested for victims of Hurricanes Floyd and Dennis, and the forest fires in the west. But these same disasters caused destruction to our Federal highways. And yet, the Administration is saying that highway damages caused by natural disasters are not emergencies; that instead, we should take highway funds from all 50 States to cover those costs.

REDIRECTING HIGHWAY FUNDING

I am also concerned by another proposal of the Administration; namely, to divert another $600 million in funds that were guaranteed for highway construction under TEA–21 and use them for purposes completely outside of the Federal Highway Administration.

This is the second year in a row that the Administration has made a proposal of this kind; and frankly, I believe it represents a gross abuse of the trust that we established with the American people in TEA–21. The amounts that were guaranteed for highway spending under TEA–21 should be spent on highways.

This Administration is, instead, proposing once again to rewrite TEA–21 to send needed highway funds to programs, such as new high-speed rail initiatives, highway research efforts, and welfare-to-work programs in the Federal Transit Administration.

I want to emphasize that I am not, necessarily, opposed to any of these initiatives, but they should be justified on their own merits. I am very much opposed to deriving their funding by redirecting funds that were guaranteed for highway construction under TEA–21.

And finally, I am disturbed by the Administration's proposal to rewrite TEA–21 in a manner that chooses a new set of winners and losers within the Federal-aid Highway Program. Under the President's proposed budget, certain authorized programs would receive increases in both contract authority and obligational authority, well above the levels called for in TEA–21.

Most of these selected programs would be effectively guaranteed 100 cents on the dollar of their proposed increase. Since the total amount of spending is set in TEA–21, the Administration is required to cut the amount of obligational authority that will be available to all other programs in order to pay for their proposed increases.

Let me state that more clearly: When the Administration proposes to fund certain programs at levels above the authorizations in TEA–21, those dollars must come out of someone else's allocation.

When one reviews the details of the Administration's proposal, it is clear that the biggest loser in the Administration's sweepstakes is the formula funding provided to the States. Formula funding to all 50 States would be cut by more than $1.2 billion in obligational

authority below the levels called for under TEA–21. Within that amount, funds available for the Appalachian Development Highway System would be reduced by almost $10 million.

Mr. Chairman, when we have the opportunity to question the Secretary about the details of his budget proposal, I look forward to inquiring as to the rationale behind some of the winners and losers that have been chosen in developing this budget.

MISSISSIPPI DELTA AND APPALACHIA

I do not agree that this is the time or the place to rewrite TEA–21. And, I most certainly do not agree that funding for the Appalachian Highway System should take a cut in order to fund any other program in TEA–21 that the Administration has decided is more important.

It is ironic, in the extreme, Mr. Chairman, that one of the new initiatives for which the Administration is seeking funding is an effort to reduce poverty in the Mississippi Delta through increased road construction. The mission of this initiative is identical to that of the Appalachian Development Highway System. Yet, this budget proposes to fund the—and I am not against funding it—but proposes to fund this new Mississippi Delta program at the same time that the Administration is proposing to cut funding for the Appalachian Development Highway System, in connection with which, the people of Appalachia were promised a highway system in 1964 or 1965—35 years ago. It is not complete, yet.

I shall not support that approach. And, I trust that this subcommittee will not support it either.

Now, despite my concerns with the budget, I, along with others, certainly welcome the Secretary here this morning. We have worked well together in the past. He is a skilled and knowledgeable Cabinet officer. We do not always agree, but, so what?

He has always been honest—and my statement says here "and forthright" with me. I think, last year, we had a little problem understanding just what kind of a curve ball he was trying to throw the subcommittee. But, he is a gentleman and a scholar. And, I look forward to hearing his testimony this morning.

Senator SHELBY. Senator Campbell.

STATEMENT OF SENATOR BEN NIGHTHORSE CAMPBELL

Senator CAMPBELL. Thank you, Mr. Chairman. I appreciate the time. I understand we have a vote in about 20 minutes. So, I am going to try and make my statement brief. But I also welcome Mr. Secretary——

Secretary SLATER. Thank you, Senator.

Senator CAMPBELL [continuing]. And also thank you for being accessible. We haven't always agreed, but you have been there and willing to discuss our differences. And I appreciate that.

GAS TAX REVENUES

I want to just maybe make a couple of comments alluding to what my friends have already spoken to. I, also, am very concerned about the President's budget, because as I understand it, these increases are going to have to come from fuel taxes—increased fuel

taxes. And I do not know if you have purchased gas in the last few days, but I have, and it is already just literally out of sight. We get calls in our office all the time wondering why Congress is not doing something to keep the price of gasoline at the pumps down.

And I am also concerned that the President's plan wants to redirect that money to pay for trains and transit programs. Senator Byrd spoke to that. Senator Shelby did, too. But TEA–21 contained provisions that all of the gas tax revenues would go toward transportation improvements, and any surplus would be divided among the States.

And as Senator Byrd has said, there are going to be some winners and loser under the President's budget, but I can tell you, as I see the numbers, Colorado is clearly going to be a loser. Under TEA–21, we should receive $308,110,281 in gas tax surplus. In the President's budget, we are going to lose over $15 million and would actually only receive just a little over $292 million.

We have the fourth fastest growing State, as you know. And we are going to have to fight for every dollar. So, from my perspective, that simply will not fly with the people of Colorado; the fact that we are going to actually lose money, when we need so much help in a fast-growing State.

NUCLEAR WASTE

Let me also just mention one other thing. This is not really in your purview or jurisdiction, but as of 11 o'clock, it very well may be, if the Nuclear Waste Bill passes.

Many of us are very divided on that. I have spoken to my Department of Transportation, yesterday, in Colorado, and a number of very interested parties, like Colorado Ski Country, which is one of our biggest employers—it is the backbone of our tourist industry, as you probably know. If this bill passes, the transportation of nuclear waste—I assume that the routes are going to be set by the Department of Transportation.

We do not have very many options, because the main corridors for both rail and highways go through our metropolitan areas of Denver, as you probably know. Many people are still gun-shy out there, if I can use that word, from less than two decades ago, when a truckload of torpedoes turned over right in the main intersection in the middle of Denver—what was called the Mousetrap.

It was days before they could get that cleaned up, because nobody knew if they were armed or if they were dangerous and a number of other things.

I can tell you that there are places that you have traveled in our State, where the rails go by—in Glenwood Canyon, as an example—1,000 feet straight down to rivers down below. And accidents regularly happen; not so much with trains, but certainly on the trucks.

We have 6 and 7 percent grades going over the Rocky Mountains; in fact, more than our neighbor to the north, Wyoming and Montana, and more than our neighbor to the south, New Mexico. And it simply could be just a devastating thing in our State if there was some kind of a wreck, an accident.

Now, I understand the thinking. Everybody wants to get rid of that stuff. I liken it sometimes to the guy that builds a nice home,

but he wants to put the septic system on his neighbor's land. Everybody wants the jobs, the economic opportunity, and so on, from those wonderful union jobs that are paid at these plants, but they do not want the waste in their State.

They want to dump it in somebody else's. And the fact of the matter is, we have got a couple of places like that, and Colorado would probably like to get rid of it, but you think of the danger of transporting it.

I was going to ask you, if we have the time, if you have given any thought about alternative routes; about where the State would come in; who would have the final jurisdiction if the State disagrees with the route, other than the Federal Government; and would we have some of those routes just literally foisted upon us, when we think it could be terrifically dangerous?

So, I will stop with that comment, Mr. Chairman, and hope we have some time to get into some questions before we vote.

Senator SHELBY. Senator Bond.

STATEMENT OF SENATOR CHRISTOPHER BOND

Senator BOND. Thank you very much, Mr. Chairman. Mr. Secretary, it is good to see you again and to have the opportunity to talk with you. Obviously, we have some warm issues that we need to discuss.

I express my personal appreciation to you for your understanding of the needs that we have in Missouri. Being right at the heart of the nation, we are the crossroads, the cross-section for all kinds of transportation. And you have helped us with bridges and with highways. And you know the importance of rail and air transport to our State.

HIGHWAY TRUST FUND

I will submit a much longer statement for the record, because, like many of the other members of the committee, I have two other hearings that I have to attend right now, but I do want to follow-up on the comments that have been made about the President's proposed robbing of the Highway Trust Fund. There is very little I could say that could improve upon the statements of Senator Byrd, Chairman Shelby.

I think gross abuse of trust is probably a good way to phrase the raid that has been proposed on TEA–21. We worked TEA–21 out as a long, hard compromise. You may remember that that compromise was one that I joined with our dear late friend Senator John Chafee, to fashion. We worked with people on all sides—on this committee, on the budget committee—and we achieved what we think is a compromise. Nobody got everything they wanted, but that is why it is called compromise. That is why it is called legislation. Back in Missouri, they call it the Bond-Chafee Plan.

Now, it is possible to run over me on this, but I think I have got a lot of friends. And my guess is that this dog is not going to hunt. And I would hope that you would not bother wasting our time trying to pursue something that is so outrageous and such a flagrant violation of the spirit of compromise that was accomplished in TEA–21.

AVIATION SAFETY

Let me touch briefly on a couple of other things. I hope that you will talk about the Open Skies Agreements which are necessary to facilitate increased global trade.

The International Civil Aviation Organization performed an audit of the FAA to determine if it met international standards, and it did. And I also would be interested in knowing to what extent you are providing assistance to other countries to meet the terms of the ICAO audit.

Finally, and very important to me, as one who flies often and who was stopped by a television reporter in Miami on Sunday to ask if I dared get onto an MD–80 aircraft after the tragedy of the Alaskan Airlines flight.

I join with my colleagues in extending our deepest sympathy to the families and friends of the victims of that flight. But we also need to know, going forward, whether the outstanding safety record of the MD–80 is in place. We want to be assured, as the traveling public wants to know, what steps are being taken to assure the safety of the MD–80 and others.

I indicated on that unexpected interview that we were going to be on the FAA like a dog on a bone, if they did not assure the safety for the traveling public of that and the other airplanes. I believe that assuring the safety is something that all of us demand from the FAA. And we urge your priority attention to this matter.

Again, my apologies for having to leave, but I will submit this, Mr. Chairman, and look forward to reading the record and following the discussions in this committee.

Senator SHELBY. Senator Kohl.

STATEMENT OF SENATOR HERB KOHL

Senator KOHL. Thank you, Mr. Chairman, and welcome, Mr. Slater.

Secretary SLATER. Thank you, Senator.

Senator KOHL. We appreciate your coming before us today to discuss the Department of Transportation budget for fiscal year 2001.

I need to be at another hearing in a few minutes, but I want to point out a few concerns this morning. We look forward to working with you as the appropriations process continues.

HIGHWAY TAX SHIFT

The transportation budget you have put forward for fiscal year 2001 continues our strong investment in highways and transit to areas in which we have made great progress. But your budget also presents some false choices on other issues.

For example, you suggest shifting $468 million in highway dollars to a new high-speed rail capital account. Now, we share the same goals, Mr. Secretary. The Midwestern States are energized about high-speed rail and would clearly benefit from this funding, but it is unfair to condition that support on a choice between highways and rail.

So, while the overture of Federal support is greatly appreciated, it is my hope that you will also help with more clear-cut solutions,

such as Senator Lautenberg's legislation to establish a high-speed rail tax credit.

LORAN-C RADIO NAVIGATION

Mr. Secretary, this budget provides $20 million for LORAN–C radio navigation upgrades, an account that your department had long ignored in previous budget requests.

We thank you for coming around to our consistent support for this vital safety and navigation aid, but as you know, we have now been in policy limbo on LORAN for over 6 years, and you have failed to deliver the promised announcement on LORAN's continuation.

The Administration's handling of this issue has reached a point of embarrassment. Now that you have delivered the dollars to LORAN, you need to work much harder at delivering policy direction and leadership.

GREAT LAKES ICEBREAKER

On a separate subject, and on behalf of the Great Lakes, let me commend you for providing $110 million for the Mackinaw icebreaker replacement vessel. The productive life is nearing an end, so this funding is a major priority for the Midwestern region.

We are also encouraged by your funding for three more Coast Guard buoy tenders for construction at Wisconsin's Marinette Marine.

AIRLINE COMPETITION

Lastly, Mr. Slater, we continue to be concerned about the state of airline competition. Travelers in Wisconsin and many other smaller and medium-sized markets continue to have few alternatives to the large incumbent carriers on many routes. As a result, only some of the benefits promised during the airline deregulation have been realized. Fares continue to be high on many routes and choice of services limited.

Moreover, startup carriers face serious obstacles in establishing competing service to the incumbent carriers. These include arguably predatory conduct by the incumbents, designed to drive their competitors out of the market. And for their part, the established large airlines seem to be content to divide the country into separate fiefdoms defended by fortress hubs, avoiding competing with each other, and thereby ensuring high fares and high profits.

In my opinion, the large airlines' behavior may not, in many instances, be unlawful under the prevailing anti-trust laws; however, it is clear that abuses exist in the airline industry and that the competitive conditions are far, far from ideal.

It is time, Mr. Secretary, for serious efforts at promoting airline competition and preventing the abuses which continue to occur.

Again, I need to move on this morning, but thank you for coming before us, Mr. Secretary. And you can expect to continue our discussions and exchanges on these important issues.

Thank you, Mr. Chairman.

Senator SHELBY. Senator Bennett.

STATEMENT OF SENATOR ROBERT BENNETT

Senator BENNETT. Thank you very much, Mr. Chairman.

Mr. Secretary, welcome.

Secretary SLATER. Thank you, Senator.

Senator BENNETT. I am interested in your opening statement, that you quote my old boss, John Volpe, and remind me once again that I sat at that same table at Mr. Volpe's side before this subcommittee. I do not know whether Senator Byrd was on it at the time, but I rather suspect he probably was, back in 1969 and 1970. The problems John Volpe addressed, to which you refer, are still with you, and they still will be.

Being Secretary of Transportation is like being Sisyphus. You keep pushing that rock up the hill and it keeps rolling back down. So, I congratulate you on your determination to keep pushing it forward and deal with this. And I will not visit all of the other issues that my colleagues have visited, because I think you have gotten the message rather strongly from them. And I will not pile on.

I–15 DESIGN-BUILD PROJECT

I do want to do some parochial things and extend my congratulations and gratitude to you and to the Department—your predecessors at the Department—for the way you have worked with us in Utah on the I–15 Design-Build Project.

If I might boast a little for my colleagues, this is a major redesign-rebuild of a critical highway section in the heart of the population core of the State of Utah, which, under normal circumstances, would take 9 years. It is being done in four-and-a-half, in a design-build project that is kind of a model project that the Department of Transportation is watching.

And at the moment, it is ahead of schedule and under budget. It is the flexibility that the Secretary has shown, the application of discretionary funds, in a logical way that has made it possible. We are very grateful to you for your willingness to do that. We think we will become a model for other projects around the country that will show acceleration of time and an impact on the budget.

I would be remiss if I did not recognize Jack Basso, who is here with you, Mr. Secretary, who has been extremely helpful in the pressure-cooker that we have of the Olympics. Nothing would be worse for us in Utah, or I think more embarrassing for Americans, to have the Olympics come to Utah and have the television cameras show nothing but orange cones and traffic jams getting to and from the Olympics.

Mr. Basso, working with the Utah Transit Authority and the Salt Lake Olympic Committee, as well as the members of the Congress, both here and in the House, if I may—the members of the other body have been a little bit more difficult to deal with than Mr. Basso has, but I think it is a tribute to you, Mr. Secretary, that you are surrounded by people of quality, who have the attitude of "Let's get it done," rather than the attitude of "Gee. What are the previous regulations and here are the reasons why we can't get it done."

We, in Utah, are very grateful to this Secretary and to this Department for the work you have done.

UTAH VALLEY RADAR COVERAGE

I still have an item that I would like to discuss with Jane Garvey. I understand she is not scheduled to appear before the subcommittee. She will not be surprised to hear me raise it once again—the need for additional radar coverage for the approach over Utah Valley for airliners coming into Salt Lake.

The FAA now tells us they intend to place a temporary ASR–9 or ASR–11 radar unit in that position for the period of the Olympic games. We continue to be perplexed why this installation is not permanent.

As I say, Administrator Garvey will be not be surprised, because I have raised this with her before, but at least we now have the temporary placement of a radar coverage there. That, at least, is some kind of recognition of the fact that there is a problem. Anything that you might do to inquire into what would be necessary to make that permanent, would be much appreciated.

Thank you.

Senator SHELBY. Senator Murray.

STATEMENT OF SENATOR PATTY MURRAY

Senator MURRAY. Thank you, Mr. Chairman. And thank you, Mr. Secretary, for coming up to the Hill today to discuss your budget.

On a personal note, I just want to express my appreciation to you and your staff for the tremendous amount of work they had done and help they have provided in Washington State. We have dealt with a lot of difficult issues out there, from rescue tugs to pipelines to freight mobility. Your staff has always been great to work with, and you have, as well. And I just want to express my appreciation.

I have had a chance to look at your budget. I think it is one that the members of this committee can work with. I think you have done a good job. It moves us toward our common goals of improving safety and mobility, economic growth, and environmental protection. And I am especially pleased with your increased investments in FTA and RSPA. I really think you have done a good job with it.

PUGET SOUND

I have a couple of things I want to mention, since I do not think we are going to get back around to questioning. I have some comments on your request for new start transit projects and full funding agreements. That is a very important issue to the Puget Sound area. We were ranked second worst traffic in the nation last year. It is not a title we are proud of. This is very important to our voters. It is strongly supported at home. Hopefully, we can get your commitment to work with us to get a full funding grant agreement this year, so we can move that project forward.

CORRIDORS AND BORDERS

Second, I wanted to mention the Border and Trade Corridor Program. You are more than doubling the funds for that. This is an

essential program. We have a lot of trade that goes back and forth between Canada and Washington. The State of Washington is the most trade-dependent State in the nation.

With the recent incident of suspected terrorism at the border, there is a new energy to this, because we want to make sure that those who are not supposed to get across the border, do not. But we also have a lot of economic activity. One of our projects assists in these border activities.

We also need to move containers quickly, efficiently, and safely with our Fast Corridor Project. So, that is extremely important to our State as well. Overall, we urge you to look at awarding projects to those who have the best policies and momentum in place, because that is very important to us.

PIPELINE SAFETY

Finally, an issue you and I have talked a lot about since last June 10, is the issue of pipeline safety. A number of my colleagues that I have talked to have heard me talk about this issue. We had a pipeline accident in the State of Washington last June 10, where three young children were killed and 270,000 gallons of gasoline were dumped into a creek bed that is now an environmental disaster.

There have been more than 5,500 accidents since 1984. I have a bill on pipeline safety that I hope we can move through. I think your office is going to have one, as well. We hope that you get that over to Congress soon.

I do appreciate your including a $10 million increase for the Office of Pipeline Safety, but I think we also have to raise the national standard, so that these pipes that were put in the ground 25 or 30 years ago are inspected more than just the first time they're laid.

There was also an accident in Pennsylvania over the weekend. It's time to have good, strong national standards, so that the people who live on these pipelines, live next to them, have their schools next to them, their businesses next to them, are assured that, as a national goal, we are making sure that these pipelines are operated safely. That is an important issue to my State and many others, as well.

We look forward to working with you to move your proposals through Congress this year and I hope we get the appropriations so the Office of Pipeline Safety has the personnel to inspect these pipes.

Thank you.

Senator SHELBY. Thank you, Senator.

Senator Stevens.

STATEMENT OF SENATOR TED STEVENS

Senator STEVENS. Mr. Secretary, I was pleased to see you in Los Angeles. It meant a great deal to the survivors of the victims of Flight 261 that you were there and so many people were there to help them with their grief.

FAA PROFESSIONALISM

While I was there, I met with the FAA. And I met with the NTSB, and the Coast Guard, and the Navy, and the FBI, and the whole group. But I was particularly impressed with the air controllers in Los Angeles. And if you have not had a chance to listen to that last recorded exchange between the air controllers and the pilots, I would recommend you do it, because I think it was an insight into the pilots and the controllers and the professionalism of those who operate our airline system. It certainly was enlightening to me.

I have been a pilot for 60 years, you know, and I really think that I have never heard such professionalism. Most people do not know that that pilot had the authority to land in L.A., and he decided to go out over the Bay to make sure he had control before he approached that airport. That is something I think the public ought to know more about. That was a decision, I think, that probably saved a great many lives at L.A. Airport.

But beyond that, I do thank you—I note, in your statement, you make a point about the role of the FAA and that tragic crash.

VOLCANO MONITORING

I only have one comment to make about the budget. And I do not know whether I will get back later to talk about it, but once again, the budget does not contain the money for the volcano monitoring activity in Alaska. I think that is unfortunate. I really think, Mr. Chairman, the Administration sort of thinks that is an Alaskan item. And I have got to put it back in, if they take it out, which is probably true, but it really is not an Alaska item. That is for the international flights that fly over our State, that are affected by the plumes that come from the volcanoes along the Aleutian chain. And they are very dangerous.

This observatory has the capability, now, to monitor those and to give warnings to the international flights, and tell them where to fly to avoid hitting the plume that comes out of the volcanoes. I do think it ought to be a total U.S. obligation to the flights that we invite from foreign countries to come into our airspace to give them warning of hazards within our airspace.

But in any event, I would hope that funding, one of these days, will be generated from the President's budget and not be something that I have to ask the chairman to reinstate in this budget.

But it is nice to see you, Mr. Secretary. And again, I commend you for the very, very calming words that you delivered to the families of the victims of Flight 261. I think it was a very significant thing for all of us. I had a great many friends on that flight. And it meant a great deal to all of us.

Thank you very much.

Senator SHELBY. Senator Stevens, we will put that funding in the budget for you and for the American people and the other people who fly over Alaska. It would be easier, though.

Senator Specter.

STATEMENT OF SENATOR ARLEN SPECTER

Senator SPECTER. Thank you very much, Mr. Chairman.

Secretary Slater, we are going to be voting in a few minutes, as it has already been announced. And it will be difficult to come back, so I would like to raise a number of issues with you. And perhaps, you could supply us some responses for the record.

Secretary SLATER. Yes.

RADAR OUTAGES

Senator SPECTER. We had some radar outages last May in Philadelphia. And I took a look at the radar system and the equipment which is being used there, and it is in urgent need of upgrading and correcting.

It is amazing to me to go into the radar rooms and see what they are doing on monitoring the flights which come in. And it has made me apprehensive every time I have been in an airplane, since, coming into the Philadelphia Airport or other airports.

There is hardly anything more important than being able to trace the airplanes, and to see how they work in those dark rooms, with so many dots on the screen containing hundreds of people, it is really a terrifying matter, which I think has to be addressed. If additional funding is necessary, I think you will find response by the Congress on a life and death matter like that.

PENNSYLVANIA PROJECTS

A second matter that is of great priority in my State involves the light rail system, which is coming into the construction of two new stadiums in Pittsburgh; one for the Steelers and one for the Pirates. We are putting about $600 million into those stadiums in a situation which raises a real question in my mind about the kind of extortion which is being practiced by major sporting teams, but that is being done.

To make it work, we are going to have to have the Federal Government come in on the transportation system. We are going to be presenting to this committee and to the chairman, Senator Shelby, some large figures this year. But without transportation, these projects do not work, which are indispensable for the life of the community.

I note that the Administration has provided only $25 million for Maglev this year; a much lower figure than the $950 million, total, which was authorized on TEA–21, and the $200 million authorized for fiscal year 2001. Maglev has the potential for enormous advances in transportation.

We could run a line from Philadelphia to Pittsburgh in 2 hours and 7 minutes, with intermediate stops in Lancaster and Harrisburg and Altoona, Johnstown, and Greensburg, and have enormous benefits for the economy of the State. I was distressed to see, with the change of governments in Germany, that they are abandoning their Hamburg to Berlin line. But we have a great capitalistic system, here.

We are now in the 21st century—Senator Byrd, I know, disagrees with that. We are now almost in the 21st century. We are pikers, compared to what they did in the 19th century, building railroads across America. We just have to provide that kind of capitalization.

Two other matters, very briefly. I know you have been involved in the U.S. Airways Pittsburgh to London negotiations. We need to

apply a little bit of pressure, because that area is being under served. And I am going to try to help you find money for the FAA Engineering Center, so we can bring that to Pittsburgh, as well.

That is a very brief synopsis of a long laundry list, Mr. Chairman.

Thank you.

Secretary SLATER. Thank you.

Senator SHELBY. Thank you, Senator Specter.

There are no other opening statements. Your full statement will be made part of the record, Mr. Secretary.

You may proceed, as you wish.

STATEMENT OF SECRETARY SLATER

Secretary SLATER. Okay. Mr. Chairman, Senator Lautenberg, members of the subcommittee, it is a pleasure to, once again, come before you. And as you noted at the outset, Mr. Chairman, I have had the good fortune and pleasure of coming to this committee on a number of occasions.

Senator Bennett made reference to Mr. Basso. Let me also mention Linda Darr and Beverly Pheto, who are here with Mr. Basso, who have done just a wonderful job working with our team on this budget.

I would like to also mention Mike Frazier, who is our Assistant Secretary for Governmental Affairs, who works very closely with all of you.

Many of you have made reference to my team, and I am fortunate to have a group of visionary and vigilant DOT professionals, who enjoy, as do I, the opportunity to work with all of you.

Let me also thank you for the opportunity to bring what we believe to be a very visionary and vigilant, and yes, creative budget, as relates to transportation, on behalf of President Clinton and Vice President Gore. It represents fiscal discipline and strategic investment.

At this time, I would like to just make a few brief comments about it, and also submit my written statement for the record.

I have often said, and I think all of you have heard me say this from time to time, that as I view it, transportation is about more than concrete, asphalt and steel. At its core, it is about people and it is about enabling them to lead safer and better and more fulfilling lives.

Mr. Chairman and members of the committee, when I look at transportation, I see opportunity, and I see freedom—what this country represents, at its core, as well. That is why I speak so passionately about the importance of transportation. I think, too, that is why we have had such a wonderful working relationship, because all of you view it in that light.

So, again, we thank you for this wonderful experience that we are having, where our work is truly viewed as a joy and not a job.

FISCAL YEAR 2001 BUDGET

The record $54.9 billion budget that we have proposed for fiscal year 2001 does represent, as has been noted, a 9 percent increase over last year's budget, which was also a record. It will continue to help us advance safety, efficiency and improve the condition and

performance of our transportation system. Working especially with this Congress and with our State and local partners and with the private sector, over the past 7 years, we have made transportation safer and more efficient. We have also made our communities more livable. We appreciate that opportunity to work with you. And I repeat it, yet again.

We gather today because we all understand that we must not rest, but build on the great work that we have already done, and develop and also inspire in developing, not only a quality transportation system for the 21st century, but also ensure the development of the visionary and vigilant workforce that will help us design and operate, maintain and manage that system.

TRANSPORTATION SYSTEMS OF THE 21ST CENTURY

The transportation system of the new century and the millennium must be safe and sustainable, to be sure, but we would also ask that we have a discussion about the fact that we, too, believe that it has to be international in its reach and intermodal in its form, intelligent in its character, and inclusive in its service. Adequate resources and nurturing a climate of transportation innovation are essential to bringing that kind of system into being.

Almost 3 years ago, on my first occasion to come before you, this distinguished subcommittee on transportation, I said that the Department of Transportation must set high goals, and that we must be architects of change if we are to build a new balanced relationship with the committee and with our partners at the State and local level.

Well, we have tried to do just that. And here, briefly, I would like to just mention what we have done and also what we have yet to do.

This is probably my last appearance before the committee. You have got a difficult schedule. And I want to, again, report to you, briefly, what we have done, what we have yet to do, and how this Administration's proposed budget and clearly what you will do with it, as we seek to have that record level number at the end of the day, how that will support our efforts.

With the enactment of TEA–21, we have provided substantial, really record-level funding for many, many priorities; the Appalachian Development Highway System, Senator; also, Congestion Mitigation and Air Quality Improvement; record-level investment for transit and highways. And we have been able to move forward in using those resources to make a difference—a difference in the long-term.

We have also used a One DOT management strategy, where we have tried to work better as a Department as a whole. In some instances, we actually have our offices together across the country, to build and improve upon our relationships with you and with our local and State partners.

Our best-in-government strategic and performance plans, I believe, have shown that we are an organization of vision and vigilance. And our budget reflects that.

Again, $55 billion, a 9 percent increase over last year, to help us build the system of our dreams and support the kind of development we need for our workforce.

Let me just mention, briefly, how we have record-level investment in the areas that matter; the areas that are identified in our strategic plan—safety, mobility, economic growth, environmental protection, and national security. All of you, in one form or another, have raised these issues during your comments.

SAFETY

We would improve safety with a record $4 billion, up 13 percent from last year. This includes a 21 percent or more increase for highway safety strategies that work; getting dangerous truck drivers off the road, reducing drunk driving, and increasing the use of seatbelts and child safety seats.

The budget also provides $1.1 billion for aviation safety. Senator Stevens noted that we were just in L.A. last week with the family members and with the friends of those who died in the tragedy—the tragic Alaska Airlines crash just a few weeks ago. Clearly, we wish, today, to express, yet again, our sympathy for the families and the friends, but we also wish to do our duty.

And so, we are pleased that Boeing and also Alaska Airlines and many of the other airlines that use the MD–80s have followed our advice. We have developed this partnership, that they actually check all of those planes to ensure that they are operating safely. That is the least we can do. And it is very, very important that we do it.

We will also continue to work with the industry to strengthen our commitment to safety. All of you know that we join the industry in setting as a goal an 80 percent reduction in U.S. commercial aviation crashes involving fatalities over a decade—by 2007. We have seen significant progress as we have worked in that regard, but we do have to deal with this issue involving Alaska Airlines and the crash and the MD–80s, and we are doing that.

MOBILITY

We will also enhance mobility with a record $39 billion in infrastructure investment, 86 percent more than the previous Administration's 1990–1993 average. This includes $30 billion for highways and for intermodal connections, record transit funding, funding to improve airports, and continued support for Amtrak, helping them to become self-sufficient. It also includes a $468 million request for a new program to upgrade passenger rail service and to make improvements necessary to accommodate high-speed rail.

I know that we have some disagreements about how we get this done. You have our proposal. I hope at the end of the day, we can provide these resources, figuring out a way to do it.

Let me also say that to pass TEA–21 was a significant compromise. And all of you should know—and I do believe you know this—that the President was there every step of the way with you. At the end of the day, the President actually had to give up about $30 billion in offsets to make it all happen, as we wanted it all to happen.

And so, when the President makes a proposal that seeks to deal with our assessment of the spirit of it in some unique way, know that we do it in the same spirit that we came forward with the additional resources to provide for record-level investment and the

highest surface transportation bill to ever pass in the history of the country.

I think it is worthy to note that we did this at a time when we were also trying to balance a budget and to deal with the economic and fiscal needs of our country.

ECONOMIC GROWTH

We would also promote economic growth by answering the President's call for advanced transportation systems with a record $1.28 billion for innovation and technology, up 37 percent from last year's level.

Through our partners, we are facilitating a climate of innovation in areas such as telecommunications and nano-technology. These areas hold enormous potential for transportation. And by the way, many of your institutions of higher education are working with us in partnership in these areas.

We would also invest nearly $1 billion to support the President's New Markets Initiative, helping welfare recipients move from the dependence of welfare to the independence of work, and improving transportation in areas like the Mississippi Delta and also on Native American reservations.

Senator Byrd, I can assure you that there is no intent in any way to minimize our commitment to Appalachia. If anything, we are trying to model these efforts after the success that we have enjoyed as it relates to Appalachia.

ENVIRONMENT

Also, we would propose a record $3.8 billion to protect our environment. One of the most significant provisions, as it relates to TEA–21, is that not only could we declare it as a record-level transportation bill, but it was also the most significant environmental bill to pass during that session of the Congress, and one of the most significant to ever pass.

And so, we are pleased to include significant funding for CMAQ and for what we call the Clinton-Gore Livable Communities Initiative.

NATIONAL SECURITY

We, also, would safeguard travelers with $1.6 billion for national security, including drug interdiction and anti-terrorism efforts. Many of you have commended the Coast Guard. Last year, the Coast Guard had a record drug interdiction effort, confiscating some 51 tons of cocaine. That effort continues and these resources will help them in that regard.

I firmly believe that our goals as a free people, served by a strong economy, in a climate of peace, can only be achieved in this coming century of the global economy, by making sure that our transportation system remains safe and sustainable, and that it does take on these characteristics that I have mentioned, as relates to the system of the 21st century.

We, at the Department of Transportation, believe that our budget will help us in that regard. The budget will improve transportation safety, maintain and expand the transportation infrastruc-

ture enterprise, reduce environmental degradation, and provide more opportunities for our citizens to pursue happiness.

I, and the members of our DOT family, look forward to working with the committee and with the entire Congress to pass a budget; hopefully, this one. We know we can work together and get things done, with a good budget that will allow us to build the system of our dreams, and also continue to develop the kind of workforce that we will need to operate and manage and maintain that system.

With that, Mr. Chairman and members of the committee, again, thank you for the opportunity to come before you. And I look forward to responding to specific questions that you may have.

[Statement follows:]

PREPARED STATEMENT OF RODNEY E. SLATER

Mr. Chairman, Members of the Subcommittee. I thank you for the opportunity to testify today in support of President Clinton and Vice President Gore's fiscal year 2001 transportation budget.

OVERVIEW

The record $54.9 billion budget we propose for fiscal year 2001, nine percent more than this year—also a record, will continue to advance the safety, efficiency and conditions and performance of our transportation system. Working especially with the Congress, our state and local partners and the private sector over the past seven years, we have made transportation safer and more efficient and our communities more livable. We must not rest on this success, but build upon it to create the transportation system of the 21st century and develop and inspire a visionary and vigilant workforce to design, operate, maintain and manage it. The transportation system of the new century and the new millennium must be safe and sustainable, to be sure, but also international in reach, intermodal in form, intelligent in character, and inclusive in service. Adequate resources and the nurturing of a climate of transportation innovation are essential to bringing this type of system into being.

Over the last three years, we at the Department have worked diligently to become an ever visionary and vigilant organization that pursues excellence in its service to the American people and casts its sights far into the future.

Almost three years ago at my first hearing before this distinguished Subcommittee as Secretary of Transportation, I said that the Department of Transportation must set high goals and be architects of change, that we must build a new balance in our relations with state and local governments, and that we must look for, not always the quick solutions, but the solutions that will make a difference in the long run. Now, in likely my last appearance before this Subcommittee, I would like to report briefly on how we have done, what we have yet to do, and how the Administration's budget will support our efforts. With enactment of TEA–21, and its substantial funding for priorities like the Appalachian Development Highway System, the Congestion Mitigation and Air Quality Improvement Program and transit, we were able to secure a solution that will make a difference in the long run. With our ONE DOT management strategy, where the modes work in coordination, and in some locations in the same offices, we are able to build new and improved relations with our state and local partners. And our best-in-government strategic and performance plans show that through vision we are willing to set high goals and through vigilance we are willing to commit the resources and time to follow through on these plans.

A TRANSPORTATION SYSTEM THAT MEETS THE CHALLENGES OF THE 21ST CENTURY

The fiscal year 2001 budget continues our effort to set the course for transportation investment that will help achieve our hopes, dreams and needs for this new century. It is a budget not just about funding concrete, asphalt, and steel, but about people. We know that our mission must be to be good stewards of the transportation enterprise so as to help people live safer, better, more fulfilling lives. Here, again, the fundamental challenge is to envision and build the transportation system of the 21st century—and to develop and inspire an ever visionary and vigilant workforce to operate, maintain and manage it.

The budget provides funding increases in the areas that matter most, those that reflect the goals in our best-in-government strategic plan—safety, mobility, economic growth, protection for the human and natural environment, and national security.

As President Clinton said in his State of the Union address, "Never before have we had such a blessed opportunity . . . to build the more perfect union of our founders' dreams."

In the 20th century we saw the building of a transportation system that allowed unprecedented new opportunities to arise and our country to achieve unheard of levels of prosperity. Our transportation system, which has responded to consumer demands, now allows just-in-time delivery, overnight packages and e-commerce. These innovations changed the way people lived in the 20th century and will significantly impact the way people live in the 21st century.

As our transportation system has grown and changed, so have the unintended consequences of that system, such as transportation-related fatalities and environmental impacts. The Federal Government must continue to show leadership in trying to alleviate these harmful unintended consequences and the fiscal year 2001 budget requests additional funding to expand this leadership role.

BUILDING UPON OUR TRANSPORTATION SAFETY RECORD

Safety is our top strategic goal, and President Clinton and Vice President Gore's top transportation priority. We at DOT have said that safety is our North Star by which we are guided and by which we are willing to be judged. Our transportation system's performance reflects the strength of this commitment. Today, 4,300 fewer people die on our roads than in 1993 and alcohol-related fatalities are at all time lows. However, over 41,000 lives are claimed on our highways every year and more Americans need to buckle-up, even though our seat belt use rate is at an all-time high. As motor carrier traffic has increased, fatalities related to motor carrier accidents have remained too high. These challenges must be successfully met and we are committed to leading the way in doing so.

The President wants to build on the safety progress we have made even as our economy expands and travel grows. We propose a 13 percent increase in transportation safety funding, to $4 billion in fiscal year 2001. This will allow us to improve highway, aviation, rail and pipeline safety.

Since transportation deaths occur mostly on our roads, we must continue making our roads safer. That is why we want to increase safety funding for the new Federal Motor Carrier Safety Administration, NHTSA, and FHWA. We are extremely troubled by the fact that 63 percent of the motor vehicle occupants who died in traffic crashes last year were not wearing seat belts and almost 60 percent of the small children who died in traffic crashes in 1997 were not in safety seats. Unquestionably, the best way to save lives and prevent injuries on the road is for each and every one of us to use a seat belt and to protect our children by properly securing them in safety seats and keeping them in the backseats. To do this, we must constantly repeat the two words "buckle up." Changing human behavior is our most difficult challenge. That is why we propose to increase NHTSA operations and research spending by 79 percent to $286 million in fiscal year 2001.

Ensuring safe motor carrier transportation is a critical part of our overall efforts to improve highway safety. Healthy economic growth and logistical innovations like "just in time" delivery have spurred significant increases in truck travel and have been a boom for the trucking industry. But while the motor carrier fatality rate has decreased significantly, from 3.0 per 100 million vehicle miles traveled in 1993 to 2.7 in 1998, the actual number of large truck crash fatalities has increased from 4,849 in 1993 to 5,374 in 1998. This is unacceptable and we are making the changes necessary to reduce these deaths. Federal motor carrier safety programs must channel resources to strategies that give us the highest payoff in reducing crashes, injuries and fatalities. We must have better focus on high-risk behavior, increase our enforcement efforts, put more investigators in the field and at our borders to enforce truck safety laws, and promote enhanced education and training programs. And that is what we propose to do more of in the fiscal year 2001 budget by increasing funding for the new Federal Motor Carrier Safety Administration by 54 percent to $279 million.

In order to increase state enforcement efforts and improve the commercial drivers licensing information, we propose to raise motor carrier safety grant funding by 78 percent to $187 million. To increase Federal border inspection efforts, increase the number of inspectors, and improve data and data analysis, we propose to increase the Federal Motor Carrier Safety Administration's operating and research funds by 21 percent to $92 million. These substantial funding increases should allow us to

aggressively reduce motor carrier fatalities and accidents and achieve our "stretch goal" of a 50 percent reduction in motor-carrier related fatalities by 2009.

Equally important is the $1.1 billion we request for our aviation safety programs, six percent above this year's level. This will help us move towards our "stretch goal" of an 80 percent reduction in the rate of fatal aviation crashes by 2007. Under this initiative, special teams of technical experts will zero in on the leading causes of crashes, fatalities and injuries so we can prevent them before they happen. The tragic Alaska Airlines Flight 261 crash reminds us of the importance of our commitment to making our skies—the safest in the world—ever safer.

Finally, let me add that as Congress acts on this budget, I hope it also acts expeditiously to pass legislation to reauthorize the FAA's programs. This is our number one legislative priority as this is the third year that we have not had a reauthorized aviation program. We need to give the FAA the management tools and the financial structure it needs to do its job.

Our railroad safety vigilance and our cooperative relationship with the railroad industry in identifying and ameliorating the root causes of rail safety challenges have paid substantial dividends over the past few years. Railroad accidents and fatalities are down eleven and twenty-nine percent, respectively, since 1993. A total $117 million, six percent above this year, is proposed to continue and expand upon our rail safety research and programmatic efforts, bringing together rail labor, management and DOT. In addition, we request $18.7 million for the Nationwide Differential Global Positioning System, within the surface transportation budget. Together with $10 million for train control projects, this gives us the foundation for safety assurance in our rail system.

Safety on our seas is also a critical component of overall transportation safety, as the Coast Guard saves one life every two hours. The fiscal year 2001 budget includes close to $1 billion, six percent above this year, for the Coast Guard to continue and expand its search and rescue capability by being better able to detect, locate and assist those in distress. As part of this effort, the Coast Guard is seeking to increase safety among the nation's commercial fishing fleet, traditionally among the most hazardous occupations in the United States. Modernization of the national distress and response system will contribute to the safety of professional mariners and recreational boaters alike on America's waters.

BUILDING INNOVATIVE MOBILITY SOLUTIONS

Mobility is about helping people get to where they want to go. It is about strengthening families, linking communities and supporting businesses. Today, roads and bridges are in better condition, Amtrak ridership is increasing, and transit ridership has seen double-digit growth since President Clinton and Vice President Gore took office—thanks to smart investment in our nation's transit systems. The number of airline passengers has grown 36 percent in seven years. We have made a great deal of progress during the past seven years and we must build on this progress and continue to advance innovative, intelligent solutions to the mobility challenges that we face.

John Volpe, our second Secretary of Transportation, anticipated our current interest in intermodalism 30 years ago, when he said that "No one mode of transportation will ever solve all of our transportation problems." Recently, the Journal of Commerce said that the United States "has by far the best intermodal transportation network in the world." But we must build from strength to strength so as to ensure that our transportation system can continue to meet the ever-increasing demands and remain the best in the world.

That is why we are engaged with our partners in a 2025 visioning process that will help us complete the task of crafting a new transportation policy architecture for a new century and a new millennium. That is also why we will be hosting an international transportation symposium to share our best practices and listen to and learn from our international partners about how can work better together to build the transportation system of our dreams.

The first crucial piece in keeping our transportation network in good shape is good sound strategic investment. Investment in transportation infrastructure proposed in 2001 exceeds the average annual investment in 1990–93 by 86 percent. The fiscal year 2001 budget includes a record $30 billion for Federal-aid Highways, a record $6.3 billion for transit, $521 million to continue Amtrak's rebuilding, $468 million to expand capital investment in intercity passenger rail service and $1.9 billion for airports.

Transit investment has become an increasingly important part of the mobility mix. The $6.3 billion requested for transit programs in fiscal year 2001 reflects our commitment to transit programs across the nation, while maintaining a balance of

funding between highways and transit. We have requested funding for 12 new full funding grant agreements.

The $1.9 billion requested for airport grants, when coupled with our proposal to permit airports to raise additional funding through airport passenger facility charges and combined with other sources available to airports, provides record level funding to meet airport infrastructure investment needs. To continue the modernization of our air traffic control system, $2.5 billion is proposed, 22 percent more than current levels. This funding will be used to further reduce the number of outages and delays and to maximize the use of our airspace.

In order to continue its capital modernization efforts, we request $520 million, 34 percent above this year, for Coast Guard assets. This includes $42 million to continue the deepwater recapitalization analysis begun last year, so that Coast Guard can modernize its aging deepwater assets in the most efficient and least costly manner.

The marine transportation system is a key element of the national transportation system, serving as a primary link between all modes of surface transportation and facilitating global commerce. It contributes more than $720 billion to the U.S. Gross Domestic Product and creates employment for more than 13 million Americans. The maritime transportation system will realize increased mobility through this budget with the acquisition of the Great Lakes icebreaker replacement, three new seagoing buoy tenders, and ongoing ports and waterways system analyses.

In addition, the budget includes a total of $47 million, $27 million in the Coast Guard and $20 million in the FAA, to operate and maintain the Loran-C navigation system. This request is 28 percent more than this year's funding level. After careful consideration, the Administration has decided to operate and maintain Loran-C in the short-term while continuing to evaluate the long-term need for the system.

A second critical ingredient for keeping our transportation network working effectively is smart investment. We must build upon the solutions that have served us well in the past, in a manner that is less damaging to our communities and our environment. Our transportation system should be managed better, so that we can make more efficient use of our existing system. The budget includes $338 million for Intelligent Transportation Systems, to improve—among other things—traffic signal control, freeway and transit management and regional multi-modal traveler information.

Smart investment includes investment in transportation solutions for the future. Last year Amtrak ridership increased substantially. This shows that many Americans continue to want intercity passenger rail transportation. The fiscal year 2001 budget proposes a substantial investment in passenger rail service, building on the growth in ridership and ability to cover operating costs that our Northeast Corridor investment has supported. Many state governments have invested in passenger rail service, including high speed rail, and Federal funding will provide the foundation for it to be a significant transportation solution for the future. We propose $468 million for this new program, in addition to continued Amtrak capital funding.

All of our goals, including our mobility goal, will be further enhanced by our budget proposal to increase technology and innovation by 37 percent to $1.28 billion. The Administration is committed to innovation for good reason: innovation has proven to be an indispensable ingredient in the longest economic expansion in American history. This budget moves our commitment to innovation to higher heights than ever before. The budget includes a nearly 80 percent increase for NHTSA—administered safety programs—a more than 80 percent increase for Intelligent Transportation Systems—and a greater than 50 percent increase for surface transportation research. Our ITS programs are demonstrating real world effects. For example, a joint General Motors-DOT partnership is demonstrating state-of-the-art rear end collision warning systems. Additionally, it measures performance and effectiveness with real drivers on public roads, not in an artificial test situation.

The funding will be utilized according to our four innovation strategies—to build partnerships, increase investment in innovation, reduce barriers and provide incentives to innovation, and support of education and training to develop the next generation of inventors.

Support for training also extends to the DOT workforce because we must invest in our own workforce to achieve the best performance. That is why the budget includes training funds across-the-board in DOT equal to at least two percent of payroll. FAA and Coast Guard will exceed this standard, as they have more unique training needs.

BUILDING THE FOUNDATION FOR ECONOMIC GROWTH

Our great economy provides better jobs and a higher standard of living for all Americans. An economy that works for all Americans depends on a transportation system that is safe and that serves all Americans. If transportation connections are not available, or not offered at a time when we need them, our work, education and overall "pursuit of happiness" are limited and sometimes impossible. Transportation accessibility has grown considerably in the past seven years, but there are still areas of this country, such as the Delta region, Native American lands, Appalachia, and some inner cities and isolated rural areas where accessibility is limited or nonexistent.

The fiscal year 2001 budget includes more than $1.2 billion, 44 percent over 2000, for programs that contribute to the nation's economic growth and increase transportation accessibility. The funding proposed to support these efforts will provide all Americans with better access to work, educational opportunities, and commercial markets. The resulting enhanced economic and community development will improve the quality of life for our nation's citizens.

The budget includes strategic investments in critical transportation links that will provide greater economic opportunities for Native Americans, the Mississippi Delta region, isolated urban and rural residents, and former welfare recipients. We propose to double the 2000 level for the Job Access and Reverse Commute Program, to $150 million, to provide essential support for the Administration's welfare-to-work goals and economic growth in our low-income workforce.

The vast rural areas and small towns of the Mississippi Delta region suffer from disproportionate isolation and diminished opportunities for access to the daily activities of life. Many Delta residents have substantial difficulties in accessing employment opportunities and related activities such as training, education, and childcare. We propose a new $69 million initiative to expand the access to opportunity to those who call the region home.

Transportation services available to Native Americans also fall below those for the rest of the nation. A total of $358 million, 50 percent above 2000, is proposed to begin to correct this imbalance. Most of this funding will be used to help meet the more than $4 billion needed to improve the condition and performance of Indian Reservation roads.

We also propose to double funding, to $280 million, for the Corridors and Borders Program. This will improve the movement of freight that is so crucial to our global economic competitiveness. Demand for this program is substantial. In fact, this year we have 150 requests totaling close to $2.2 billion for the limited funding that we can award at our discretion.

And here in the Washington metropolitan area, the President committed $25 million towards a new Metro station to promote economic development along New York Avenue. We also are providing a Full Funding Grant Agreement for the Largo extension and propose $600 million to complete the federal investment in the replacement of the Woodrow Wilson Bridge.

BUILDING AN ENVIRONMENT FOR OUR CHILDREN

In his State of the Union address, President Clinton reminded us that we have "put to rest the bogus idea that you cannot grow the economy and protect and enhance the environment at the same time." This Administration has committed itself to protecting our environment. Our air is cleaner and our water is purer today than seven years ago, even as we enjoy the longest economic expansion in our nation's history. Our commitment to protecting our nation's environment continues in this budget, with a total of $3.8 billion, almost five percent above this year for DOT's environmental programs.

To aggressively implement the Administration's livability and environmental agenda, a record $6.3 billion, as already mentioned, is proposed for transit programs and a record $1.6 billion is proposed for the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. Support needs to be continued and replicated across the country for increased use of alternative transportation systems providing access to and within national parks and other public lands, such as the new propane fuel bus system inaugurated last summer to serve Arcadia National Park and surrounding communities in Maine.

Our budget increases by almost fifty percent the funding provided to the Transportation and Community and System Preservation Pilot Program. This will aid communities in developing smart-growth plans to combat congestion and sprawl, and ensure in the words of Vice President Gore, "that communities are not only better off, but better." There is tremendous demand for these programs, as communities desperately want to tackle livability issues.

Additional funding is also requested for the Advanced Vehicle Program, DOT's contribution to the effort to develop clean, fuel-efficient vehicles for the new century. Programs like these are crucial to building a transportation system that meets the needs of future generations. The Detroit International Auto Show recently spotlighted the clean car developed through the Partnership for a New Generation of Vehicles. Our Advanced Vehicle Program, with $20 million in new funding, will apply similar technologies to produce clean trucks and buses.

KEEPING OUR NATION SECURE

DOT plays a critical role in ensuring that the transportation system is secure, that U.S. borders are safe from illegal intrusion, and that the transportation system can meet national defense needs in times of emergency. In addition, the Coast Guard and the Maritime Administration continue to perform several specific national security functions in support of the Department of Defense. A total of $1.6 billion, eight percent above this year, is proposed for DOT national security programs.

This includes $617 million, eight percent above this year, to fulfill the Department's commitment to conduct drug law enforcement operations. This funding will enable the Coast Guard to maintain an effective presence in the transit and arrival zones by mounting strong and agile interdiction operations. And it will build on the record interdiction effort of last year, with 70 tons of drugs confiscated.

It also includes $99 million for the Maritime Security Program, so that we can ensure that vessels will be available to carry military cargo during war or national emergencies.

CONCLUSION

I firmly believe that our goals as a free people, served by a strong economy and a climate of peace, can only be achieved in this century of the global economy by making sure our transportation system remains safe and sustainable, and becomes over time international in reach, intermodal in form, intelligent in character and inclusive in service. We at DOT, ever visionary and vigilant, are committed to building this type of system. The fiscal year 2001 budget reflects the Clinton-Gore Administration's commitment to the future of this country and the recognition of the importance of transportation to enjoying sustained growth and an improved quality of life.

Our proposed budget helps to ensure that transportation remains the tie that binds us together as a people—and the foundation of our prosperity as a nation. The budget will improve transportation safety, maintain and expand the transportation infrastructure, reduce environmental degradation, and provide more opportunities for our citizens in their "pursuit of happiness."

I, and the members of the DOT family, look forward to working with this Subcommittee, and the entire Senate and House, to pass a budget that will aid us in building the transportation system of our dreams and the ever visionary and vigilant workforce we need to meet the challenges and embrace the limitless opportunities of the 21st century and the new millennium.

Senator SHELBY. Mr. Secretary, we have 3 or 4 minutes to get to our vote. So we will recess, and we will come back.

Secretary SLATER. Okay.

Senator SHELBY. Thank you.

Mr. Secretary, thank you for your indulgence.

Secretary SLATER. Thank you, Mr. Chairman.

Senator SHELBY. You are always a gentleman.

Secretary SLATER. Thank you.

DISCRETIONARY PROJECTS

Senator SHELBY. Mr. Secretary, in the transportation appropriations bill and the accompanying conference report, a number of discretionary projects are identified that are important to members of Congress. As the various agencies of your department administer the programs under which these projects are funded, I think it is important that the lines of communication between your office and the appropriations committee be open. They have been——

Secretary SLATER. Yes.

Senator SHELBY [continuing]. In the past. And that we be kept informed of any problems that you would encounter as you administer those projects.

Having said that, can I have your assurance, on behalf of the committee, here, that your office will fully brief the subcommittee staff, both majority and minority, before you sign off on any final disposition of any discretionary grant programs that Congress provided direction on in the conference report this past fall? Is that possible?

Secretary SLATER. It is possible, sir. You have our commitment.

Senator SHELBY. Okay.

Secretary SLATER. Thank you.

Senator SHELBY. Mr. Secretary, there are several programs under which the year 2000 transportation appropriations bills identified specific projects. And some of these programs have not yet made grant release announcements.

Secretary SLATER. Yes.

Senator SHELBY. Can you tell us when to expect grant announcements for the Transportation and Community System Preservation Program, the Job Access and Reverse Commute Grant Program, the National Corridor Planning and Development Program, the Intelligence Transportation Systems Program, and for the remainder of the grants under the Federal Lands Program and the Ferry Boats and Facilities Program? Can you get with me on this, or do you want——

Secretary SLATER. Yes.

Senator SHELBY. Yes. I am on it, now.

Secretary SLATER. What I would like to do, Mr. Chairman, is to follow-up with more specific dates. We are working on all of these discretionary grant programs. And we are hopeful that we will be able to move on most of them during the spring.

Senator SHELBY. Okay.

Secretary SLATER. But you may have some that will come a little later in the year. Our objective is to move on this as quickly as possible.

USER FEES

Senator SHELBY. A total of $1.3 billion in new user fees is included in this budget, as we talked about.

Secretary SLATER. Yes.

Senator SHELBY. Mr. Secretary, is there any reason for the second kick of a mule? I think that this is actually the third or fourth kick on these user fee taxes. Do you think it would drive home the lesson more effectively if we reduce the appropriations for the Office of the Secretary by the same percentage of proposed user fees that get authorized and enacted each year?

Secretary SLATER. Well——

Senator SHELBY. That is probably not a fair question.

Secretary SLATER. Well, I have some people back here who definitely want to know what my answer is. But I would say, Mr. Chairman——

Senator SHELBY. Do you want to furnish the answer for the record, later?

Secretary SLATER. I can furnish an answer for the record, in more detail.

[The information follows:]

The fiscal year 2001 budget proposes $1.3 billion in new user fees for aviation, rail safety, marine safety, hazardous materials safety, and the economic regulation of surface transportation. The Administration policy is to introduce user fee funding where appropriate. Users generally are more willing to pay fees when such fees are dedicated to improving the quality of the programs that affect them directly.

Within the FAA, $965 million is included to establish cost-based user fees for air traffic services. Under this proposal, the collections each year from the new cost-based user fees and existing excise taxes combined would be equal to the total budget resources requested for FAA in each succeeding year. For FRA $103 million will be collected from railroad carriers to offset the costs of the rail safety program—including safety and operations, and safety-related research. Within the Coast Guard $212 million will be collected to recover a portion of the Coast Guard costs for navigation services, to be paid by U.S. and foreign commercial cargo carriers. Fishing and recreational vessels would be exempt. New RSPA user fees total $5 million for increased hazardous materials registration fees, to be paid by shippers and carriers of hazardous materials. User fees totaling $17 million will be used to completely offset the expenses of the Surface Transportation Board. The fees would be collected from those who benefit from the continuation of STB functions, i.e., railroads and shippers.

Senator SHELBY. Or on a telephone call.

Secretary SLATER. I can, but let me just say for the record and the public debate of it all, that it is the policy belief of this Administration that there are certain benefits that a defined group of either businesses or individuals enjoy, and that those activities would be appropriate for user fee consideration. That is why we continue to come back. We do have some programs that actually rely, to some extent, on user fees. So, it is not——

Senator SHELBY. But you do have to consider the political climate in anything.

Secretary SLATER. Definitely.

Senator SHELBY. You understand it better than I do.

Secretary SLATER. We understand that, but in an effort not to second-guess the Congress, we just want to keep it before you and would hope that at some point, you would find it acceptable.

FUNDING FIREWALLS

Senator SHELBY. Can we talk about firewalls for just a minute?

Secretary SLATER. Yes.

Senator SHELBY. In conversations with me and also Chairman Stevens, you have made clear that you oppose the creation of a firewall for the aviation account, and would recommend a veto of a bill that created a firewall or other special budgetary treatment——

Secretary SLATER. Right.

Senator SHELBY [continuing]. That was not offset or paid for by other spending cuts. I assume that must be, in part, because of the difficulty you are experiencing managing all—and I mean all the transportation programs in the context of the highway firewall.

Secretary SLATER. That is right.

Senator SHELBY. Would you affirm your opposition to special budgetary treatment today, or would you explain the absolute inconsistency of proposing changes to the highway budget firewall, while not opposing the creation of another firewall that would only create increased pressure on the accounts that your budget, Mr. Secretary proposes to increase by abrogating the highway firewall?

Secretary SLATER. Sure.

Senator SHELBY. It seems like a little paradox, here.

Secretary SLATER. It is difficult. I thought, when the question was asked or you alluded to it during your comments, that it was a good question, and I hoped that I would have the opportunity to respond to it.

Clearly, in TEA–21, at the end of the day, a number of compromises were made in order to bring trust back into the effort, to spend growing balances in the trust fund, but to do it in a way that was fiscally responsible. As I noted earlier, at the end of the day, because of the quality of the bill and the desired financial commitment, the President actually had to give up about $30 billion in offsets that he had suggested for other purposes. So, there was, definitely, the compromise.

Senator SHELBY. But there always is, is there not?

Secretary SLATER. There always is. As it relates to FAA, we have been clear in saying—as we said as relates to surface transportation, "no off-budget." We have been very clear in that regard.

We have also expressed our non-support for firewalls for the very reasons that you have noted. They present very difficult situations for——

Senator SHELBY. They cause you trouble in your Department.

Secretary SLATER. It does, anytime you are trying to balance. And in that sense, I find myself in the same position that the committee finds itself in, when you have to make choices.

We have used the word "balance" a couple of times over the course of the hearing. I think that in TEA–21 we were able to capture a pretty good balance in the way we gave emphasis to certain programs; highways; transit; a focus on safety; a focus on the environment; those kinds of things. I think if we can do the same thing as relates to the FAA, and figure out how you might unlock the trust fund, dealing with receipts and interest, then I think that at the end of the day that might carry the day.

Now, we still have some delta, even if you are able to get a commitment among the parties to go with receipts and interest. You still have about a $1 billion annual deficit, and we have to figure out how you come up with that amount, as well.

Our proposal is to do it through user fees, but there are some other options on the table. Again, at the end of the day, we will be against taking the trust funds off-budget. We will be against providing any kind of guarantee as relates to the general fund, but it would not necessarily be against unlocking the trust fund and providing for receipts and interest from the Aviation Trust Fund.

TRANSIT FULL FUNDING GRANT AGREEMENTS

Senator SHELBY. On Transit New Starts, Mr. Secretary, it is my understanding that TEA–21 authorized a total of $8.4 billion commitment authority in guaranteed funds for new starts.

Secretary SLATER. Yes.

Senator SHELBY. Our staffs have informed me that after the enactment of the fiscal year 2000 appropriations bill, $2.8 billion was left uncommitted for the rest of the authorization cycle; that is, through fiscal year 2003.

And finally, if all the transit projects that are included in the Administration's request do sign full funding grant agreements with the Federal Transit Administration during the fiscal year 2001, all the commitment authority that was authorized in TEA–21, will be committed, leaving no uncommitted funds available for new funding grant agreements before 2003.

Is that an accurate description of the current status of the new starts pipeline? And what would happen under the proposed budget request?

Secretary SLATER. I believe it actually is. We have a number of full funding grant agreements that we are already providing support for. I think that number is 14. We have about three that are pending, and we have this new round of 12 new full funding grant agreements.

And you are correct. After all of those run their cycle, we will have used up the amount authorized for this purpose in TEA–21.

Senator SHELBY. Mr. Secretary, it is also our understanding that some, if not most, of the projects proposed for new full funding grant agreements in the budget have not yet completed the NEPA process or have records of decisions filed, which means that they are not yet ready to move from the preliminary engineering to the final design stage of the project. Is that right?

Secretary SLATER. Well, I would have to look at the individual projects.

Senator SHELBY Do you want to get back to us on that?

Secretary SLATER. That is correct. I will get back with you.

[The information follows:]

The requirements of the National Environmental Policy Act of 1969 (NEPA) are met when a Record of Decision (ROD) or a Finding of No Significant Impact (FONSI) is issued. Six of the twelve proposed FFGAs have RODs: Hudson-Bergen MOS–2; Portland-Interstate MAX LRT; Seattle-Central Link LRT; Pittsburgh-Stage II LRT; Salt Lake City-CBD to University LRT; and Washington DC/MD-Largo Extension. The remaining six projects are on track and will be issued a ROD or FONSI by June 30, 2000.

Secretary SLATER. I will say this, Mr. Chairman, that we do have a criteria for making these kinds of judgments. The projects that meet that criteria, are in the development stage, but they are far enough along for us to make a judgment about local commitment. We have a general sense about the scope of the project. These are the kinds of things that we take into account before entering into full funding grant negotiations.

You are correct in noting that at the end of the day, we may or may not have all of these projects meet all of the requirements and move forward.

Now, Senator Lautenberg mentioned the Hudson-Bergen project earlier. And by the way, Mr. Lautenberg—Senator, thank you for your leadership on that project and promoting it. This is actually a project that is rather unique in that the request has been to provide the full funding grant agreement, but there is no request for money right now. They are requesting money a little later on.

So, there is a difference in the stage of development of all of the projects, but all of them have met our criteria for full funding grant agreement negotiations.

FISCAL YEAR 2000 FULL FUNDING GRANT AGREEMENTS

Senator SHELBY. Mr. Secretary, I believe last year's budget request included seven proposed full funding grant agreement projects, which you expected to approve before the end of the fiscal year 2000. We are halfway through that 2000 year. How many of those projects have actually received an FFGA? It is my understanding it is only one; the Dallas-North Central LRT.

Secretary SLATER. Let me check that, Mr. Chairman. I do not have the information at my fingertips. But I will say this, that if they do not meet their commitment to have their work done within the prescribed period of time, then we will deal with that situation.

So, if we have time within the cycle, then they still have time to get their work done. But without knowing where we are, exactly, with each project, I would like to get back to you with specifics on that.

[The information follows:]

FTA entered into a FFGA with Dallas on the construction of the North Corridor LRT project on October 6, 1999. The proposed FFGA's for San Diego/Mission Valley East and Fort Lauderdale/Tri-Rail Commuter Rail have been forwarded to Congress for approval; and the Newark/Newark Rail Link (MOS–1) project is under development within the Department. The Memphis Medical Center extension underwent significant scope changes and funding increases; thus was rerated and is now proposed for FFGA in fiscal year 2001. The Salt Lake City Downtown segment has been withdrawn and an extension of the North South LRT to the University is proposed in the fiscal year 2001 budget. The Orlando I–4 Central Florida LRT project was also withdrawn from consideration because of loss of local financial support.

Senator SHELBY. Okay. How do you think that the other 70 or so authorized new start projects that are currently in alternative analysis or preliminary engineering are going to react to a budget proposal that completely cuts them out of the running for full funding grant agreements before the year 2004?

Secretary SLATER. I think that they would want to know that we are already beginning the process of preparing for the next re-authorization cycle of what would be TEA–21+. And many of these projects really take time for development. I still think that there will be opportunity to be responsive to those projects, over time.

Senator SHELBY. Okay.

Secretary SLATER. I think that there may be things that we can do in the interim that really keep that process going. We would look forward to working with those individual States and locales.

Senator SHELBY. We hear from everybody up here, as you know.

Secretary SLATER. Oh. We do, too.

Senator SHELBY. I know.

Secretary SLATER. Yes, sir.

Senator SHELBY. Both of us. Same day, probably.

Secretary SLATER. Right.

LOS ANGELES MTA

Senator SHELBY. The budget includes a request for $50 million for the L.A. MTA to buy new buses in order to implement the bus consent decree ordered by the Special Master.

Secretary SLATER. Right.

Senator SHELBY. The judicial process associated with the consent decree litigation is ongoing and it is very complex.

Secretary SLATER. That is right.

Senator SHELBY. It is my understanding that a stay has been granted by the 9th Circuit Court of Appeals, while an MTA appeal of the decree is pending. Does not a Federal budget request for funding to implement the bus consent decree prejudge the results of this ongoing judicial process? In other words, that is not finished, yet. Or are we getting a little ahead of ourselves?

Secretary SLATER. We may be, but it has always been our hope that the parties would figure out a way to resolve this matter without taking it to the term of a court decision. And if that, in fact, occurs, we would need to be in a position to respond positively to that kind of potentiality.

But you are right in noting that we are making the funds available, while you actually have a matter before the courts. But we also have an opinion that we have expressed in this matter, as well.

To provide this money at this time is consistent with how we have viewed the facts of the situation. But again, we are not moving forward until there is a court decision or until the matter is resolved in some way short of a court decision.

COAST GUARD OPERATIONAL READINESS

Senator SHELBY. The Coast Guard has expressed concern that operational readiness is eroding. In fact, in a recent speech at the Center for Naval Analysis, the Commandant focused on the reduced availability of C–130s and the lack of spare parts needed to keep them flying to illustrate the readiness challenges the Coast Guard is facing.

Secretary SLATER. Right.

Senator SHELBY. I have asked the committee staff to look into it and have been informed that even though Congress fully funded the aircraft maintenance line into the 2000 appropriations bill, the Coast Guard reprogrammed funds below the notification threshold from the Aircraft Maintenance Account to pay for recruitment activities.

Will you look into this and provide a response for the record, why the Coast Guard is citing the lack of readiness in an account that they dun for another activity?

Secretary SLATER. Okay. I will look into it, but if I may, Mr. Chairman, I would like to note, as relates to the reprogramming, it is an amount that is below what would be the general threshold of concern over which we would never go beyond.

And so, while we definitely would want to talk this through, we did make a reasonable judgment that we were acting within the parameters of our ongoing agreements and relationships.

The other point I would like to make is that I think Admiral Loy and our Coast Guard have really faced quite a difficult challenge. As you know, they are having to take on additional responsibilities in the drug interdiction effort and migrant interdiction effort. We really have had considerable difficulties in our recruitment efforts, much like the Armed Services, as a whole.

We are now working with Secretary Cohen and the Joint Chiefs of Staff and the National Security Council with Sandy Berger and the President to figure out how we address this. But in the short

term, we did need to have some reprogramming to beef up our efforts in this area. I am pleased to report that we are actually on track to do better this year, as relates to recruitment.

Also, the place where we have been hurt has been having the kinds of people that really have the skills, frankly, to do a lot of the maintenance work that you have raised. Also, the Department of Defense, because of a contracting relationship change that they have undertaken, now actually contracts out much of their work as relates to this question.

We, then, do not have the benefit of being able to look to the pool when it comes to getting some of the spare parts that we need for this purpose. It is a difficult situation. It is a challenging situation. What we were trying to do here was to do something in the short-term that would help us bide our time until we could work with the committee, with the Congress, and with the Administration, to deal with this over the long-term.

PASSENGER RAIL

Senator SHELBY. Okay. Expanded inner city rail capital. I will try to be brief.

Secretary SLATER. Okay.

Senator SHELBY. The budget proposes to transfer $468 million from the Revenue Aligned Budget Authority for the purposes of making grants to Amtrak or to a single State or consortium of states to improve passenger rail service. These funds are in addition to the $521 million for Amtrak capital grants consistent with the glide path to operational self-sufficiency by 2003——

Secretary SLATER. Right.

Senator SHELBY [continuing]. Which both Amtrak and the Administration have committed to. One of the things that strikes me as a little odd, Mr. Secretary, about this new program, in addition to being funded out of the highway gas tax receipts, is that a 50 percent match is required if the grant is made to a State or consortium of States, but no match is required if the grant is made directly to Amtrak. Is that understanding not correct?

Secretary SLATER. Your point is well taken. Amtrak, frankly, because of its limited and tight budgetary environment, is not required to match, but because we are trying to generate more commitment from other sources—the States, in this instance, are required to meet this opportunity with a 50/50 match.

If I may, also, Mr. Chairman, I know that this issue has been a matter of concern to you, because you have expressed, as I have, in many instances, agreed, that when it comes to rural America, the presence of Amtrak is not as we would desire it.

What we have sought to do in the short-term is to deal with the financial viability of Amtrak. And I am pleased that we have made considerable progress, in that regard.

It is really hard to imagine that from 1997 to this point in time, Amtrak has experienced three consecutive years of ridership increases; about 10 percent over that period of time. They have also had a 16 percent increase in revenues. The service has improved. They have done a better job.

And we are going to have high-speed rail in the northeast corridor by the summer. We have the regional service that we just un-

veiled from New York to Boston, dealing with the non-electrification of the track. And then we will have the Acela Express Service in the summer.

ACELA RAIL SERVICE

Senator SHELBY. What will be the time from Washington to Boston, after that?

Secretary SLATER. From Washington to Boston, I think we are going to cut about two-and-a-half hours off of that trip.

Senator SHELBY. I need to ride that with Senator Lautenberg, do I not?

Senator LAUTENBERG. I would like to have you on that train. Mr. Chairman, I have a special catering order from off the train, but we will be able to eat——

Senator SHELBY. A glass of water, I hope.

Secretary SLATER. You know they said that time really passes fast when you are having fun. So, the two of you together, talking about transportation matters, that time would go pretty quickly.

Senator SHELBY. Well, we would not want to do that unless you joined us in the——

Secretary SLATER. Now, I would love that.

Senator SHELBY. And we would have to have our senior advisor here, Senator Byrd.

Secretary SLATER. Oh. Yes.

Senator SHELBY. He knows more about all of this than all of us, basically.

Secretary SLATER. Okay. Well, let me say this: I do believe that because of the leadership of this committee, when we unveil that Acela service, it would be really quite a joy and an honor for all of us to experience that together, because I can tell you, in 1997, Amtrak was on its back. It was really the Senate, first, and then the entire Congress and the Administration, all of us working together, to get that creative budgeting there early on, and then to provide the plan to get them to self-sufficiency over a 5-year period. They have done a really good job.

The Amtrak Board of Directors, now, is totally in place. Governor Tommy Thompson is doing a great job as the chair; and Governor Dukakis, as the vice chair, a great job; also, Mayor Smith, working with the mayors has done a super job; and Governor Holton, formerly of Virginia, is on the board. It is a great board. They are doing a good job.

Senator SHELBY. That is good.

Secretary SLATER. We believe, though, that the $468 million would be helpful, not so much in the northeast corridor, but to ensure that as we celebrate that service, that we can also hold out promise for Alabama and the Gulf Coast region.

Senator SHELBY. Louisiana.

Secretary SLATER. That is right. Louisiana. Mississippi.

Senator SHELBY. Georgia.

Secretary SLATER. The north——

Senator SHELBY. The deep south.

Secretary SLATER. The deep south.

Senator SHELBY. North Alabama.

Secretary SLATER. So, that is why we have this proposal; to give us an opportunity to engage States and other interested parties in looking at a broader vision for high-speed rail.

Senator SHELBY. Senator Lautenberg, thank you for your indulgence.

Senator LAUTENBERG. Thanks very much. Mr. Chairman, it is a pleasure, again, to have our Secretary with us. He has done a good job. The people who work with and for him have carried their share of the responsibilities very efficiently.

We had Mr. Basso, up in New Jersey, and he helped us in the review of what is taking place in the light rail service. He understood our needs and where we have to go, even though the budget, Mr. Chairman, is large—$55 billion, roughly. But the need is even larger than that. For us to have the kind of transportation systems that a nation like ours, with the size of our economy and the size of our country, and the interest of our people.

They are just sitting in airports. And I see more people having lunch on the floor at Newark or wherever you go the places are crowded. The schedules are jammed. They are often late.

When we talk about rail or we talk about other modes, we are talking about a necessity to make sure that everything works as efficiently as it can. When service is held up in Newark, believe me, you feel it in Alabama, and you feel it in Louisiana. The system is a totally integrated system.

And so, it was exciting to be on the regional Acela. It is a door-opener. I was reminded by Governor Dukakis that the speed that we have now, in this regional thing, is only a catch-back; not a catch-up, but a catch-back. Because in 1959, they had the same 4-hour speed. And it disintegrated over the years, as the equipment and the facilities disintegrated. But now——

Senator SHELBY. In 1959, they had a——

Senator LAUTENBERG. They had a 4-hour speed. But we are going to be down to 3 hours, shortly, there. And I must point out, and I had the staff get this right away, the Acela regional train showed a 45 percent boost in ridership over the trains they replaced—45 percent. I think, when did we start, 2 weeks ago—that—to open that service?

And I thank you, Mr. Chairman, for your help in getting that investment made. It makes it so easy for my three grandchildren, who live in Boston, and their mother and their father, to come down to visit me. I know that was a nickel-and-some factor.

We can do better, I hope, than the $468 million in the President's budget.

Mr. Secretary, do you think the Administration is going to be soon in a position to endorse my legislation or expand the use of capital, here, with the $10 billion bond support?

That would have a substantially lower cost than what we have to do now, in order to get funding into the railroad. That $10 billion of financing would, over the 10-year period, cost about $2 billion. Is that—$2.3 billion. You get leverage four times out, as a result of that. I hope that we will get an enthusiastic endorsement from the Administration very soon.

Secretary SLATER. Thank you, Senator.

BLOOD ALCOHOL CONTENT (BAC)

Senator LAUTENBERG. You know, we are still working on reducing the blood-alcohol content while driving. I know that both Senator Shelby and Senator Byrd share my view that we have to be more diligent about reducing those fatalities. And it has come down. And it is good to see it.

The last 2 years, only one State out of 34 has adopted a .08 BAC. It is a poor record, considering all the States, except Kentucky, has a chance to pass it and get the funding.

Does the President support the .08 BAC?

Secretary SLATER. He does. And Senator, I would note that for the first time in 1998, we actually had the percentage of alcohol-related highway fatalities to fall below 39 percent. It is actually 38 percent.

Senator LAUTENBERG. For fatalities or——

Secretary SLATER. That is right. Thirty-eight percent of all fatal crashes involving alcohol. At one time, it was actually 55 percent; years ago. So, we have significantly brought that figure down. It stabilized at around 41 percent for many years of this Administration, but now we are below 40, and at 38, which is quite an improvement.

Senator LAUTENBERG. And you know, it says one thing, Mr. Secretary, and I would appreciate your comment. Does the incentive program go far enough to induce these States to move to improve the safety record, vis a vis, driving while under the influence?

Secretary SLATER. It does not go far enough. As you know, the Administration joined you and others, Congresswoman Lowey, in proposing a national standard of .08 BAC. We were not successful in that effort, but one of the good provisions of TEA–21 does provide an incentive program. So, it does not go far enough, but it has been helpful. Hopefully, though, we can win the battle and get .08 BAC as the law of the land.

Senator LAUTENBERG. I think, Mr. Secretary, and for the record, I think that it needs more than an incentive, which has, thus far, not really induced much support. We found out when we raised the drinking age to 21, and there, I am told by the safety agencies, Senator Byrd, it saved 15,000 families from having to mourn the loss of their child in these last 14 years.

If I feel proud of one thing that I have done, I must tell you, it is that. We can bring that terrible record down even further, if we would just get on this with seriousness. There were incentives out there for years to bring the drinking age up to 21, and not much happened.

When we said, "Okay. We are going to reduce your highway funds," even that was a drag, but finally everybody understood that Lautenberg was serious and the Senate agreed, and we got it done.

AIR CARRIER ACCESS TO HEATHROW

I want to talk for a minute about air carrier access to Heathrow Airport. Now, you have been in negotiation with the UK for some time regarding a new bilateral aviation deal. And I, along with many of my colleagues and the Administration, have been insisting

that any new aviation deal with the UK include access for new U.S. carriers to Heathrow.

I have been to Gatwick. And I have been to Heathrow. And I will tell you, Heathrow is the difference between a more timely arrival to your destination by a significant measure. I think I paid $100 cab fare from Gatwick to London. In my view, this is not the way things ought to happen.

Is there any possibility that you would agree to a new deal with the UK that would not include access for new U.S. carriers to Heathrow? I hope not.

Secretary SLATER. No. Senator, that has been one of the conditions of our negotiations. Those conditions have also grown to include restoration of the service from Pittsburgh to London, as well as a new designation of U.S. carrier to Heathrow.

Senator LAUTENBERG. Well, it is nice to have Pittsburgh-London service, but we need it in the New York/New Jersey area, where so much traffic occurs. I hope that we would not fall prey to a mini-deal that would allow British Airways and American Airlines code sharing without guaranteeing access for U.S. carriers to Heathrow.

Secretary SLATER. You should know, Senator, that we have already requested additional information on the British Airways-American Airlines issue. There is no intent, on our part, to address that until we have a greater sense of equity as relates to the U.S.-UK aviation relations.

COAST GUARD CUTTERS

Senator LAUTENBERG. Last month a new Coast Guard cutter went into service, patrolling the Atlantic seaboard from New Jersey to South Carolina, after three boats sank off the coast of New Jersey, this last winter. This is welcome news, however. And something that the Chairman raised and you talked about a moment ago, the cutter patrols a very large area. More ships could be added, and over the next few years, the Coast Guard is expected to add new vessels——

Secretary SLATER. Yes.

COAST GUARD MISSIONS

Senator LAUTENBERG [continuing]. But for drug interdiction duties, not search and rescue and some of the other responsibility they have, what is DOT's plan to ensure that all Coast Guard missions, not just the drug interdiction duties, are able to be carried out fully? Because it is my understanding that the Coast Guard is short 1,200 people and retains only 50 percent of its pilots. And boy, they do one load of work, I will tell you.

Secretary SLATER. They do.

Senator LAUTENBERG. We squeeze them constantly; give them more assignments. We see what happens with illegal immigration. We see what happens with pollution control. We see what happens with navigation aids. And the Coast Guard is there when we have these terrible tragedies; whether it is an airplane going down or a boat sinking. The Coast Guard is there in terrible weather, very difficult assignments.

Secretary SLATER. You are right.

Senator LAUTENBERG. So——

CHALLENGES FACING THE COAST GUARD

Secretary SLATER. Senator, your point is well taken. You know, the motto of the Coast Guard is "Semper Paratus"—"Always ready". The Coast Guard actually saves a life every 2 hours. During the Hurricane Floyd experience, they actually saved 500 lives over a period of time. It is a remarkable organization. It has been very much at the forefront in a lot of the streamlining and reinventing effort of this Administration over the past 7 years.

We have gotten to a time, now, where we really are starting to look at the long-term challenges facing the Coast Guard; their readiness and their deepwater equipment needs and the like. We are starting to really address those concerns.

Let me just mention one or two things in that regard. First of all, I should say, that even as the Coast Guard has done some reprogramming of late, and I go back to the Chairman's question in this regard, they have not, in any way, stepped back from their safety responsibility, which they consider primary—search and rescue. Their ability to perform there is consistent with where they have been.

Over time, we would hope to increase the ability to perform at that level, in this respect and across the board, with our deepwater initiative, which is a major, multi-billion dollar acquisition program need that we have.

We have recently gone through a process where we have basically put together a plan for this purpose. The President's budget includes $42 million to begin the process of moving forward on this initiative. But we will have to come to the Congress in years to come with a request for much, much more. We are putting together a program and a process for doing that in a way that is thoughtful and that evidences reason and reflection.

We have also engaged in a roles and mission effort as relates to the Coast Guard. This is sort of a companion effort with the Deepwater Initiative. It is to re-examine the roles and the missions of the Coast Guard in this new environment.

And there, again, I think we have had considerable success and would welcome an opportunity to report to you and other members of the committee and your staffs about our progress in that regard. We are looking at the long-term needs and the long-term view of the Coast Guard. And we appreciate your comments in that regard.

I think Admiral Loy and Admiral Card, the Commandant and Vice Commandant, have done a great job. If I may, I would like to mention Admiral Naccara, who headed our Y2K initiative within the Coast Guard. Super job working with IMO and putting together a code of best practices that became, really, the standard for the nations of the world. The Coast Guard is a fine organization. We appreciate your support and your expressions of concern regarding some of the challenges faced by the Coast Guard.

Senator LAUTENBERG. Thank you very much. Thanks, Mr. Chairman.

Senator SHELBY. Senator Byrd.

Senator BYRD. Thank you, Mr. Chairman. And thank you, Mr. Secretary.

Secretary SLATER. Thank you.

REDISTRIBUTION OF HIGHWAY FUNDING

Senator BYRD. Your budget proposes many changes in the treatment of the programs under TEA–21. These proposals have the result that there are some big winners and some big losers in the distribution of the total amount mandated for highway funding under TEA–21. Your formal testimony makes mention of some of the big winners under your budget.

I think it is also important that we have a discussion about the losers under your budget. These are the programs that would have to have their obligation and limitations cut in order to pay for the increases that are being proposed elsewhere.

The biggest loser is the formula fund provided to the States. As you may recall, I offered an amendment. It was co-sponsored by Senator Phil Gramm, Senator John Warner, and Senator Max Baucus, at the time we had the TEA–21 legislation before the Senate.

In the first place, we had to fight like the dickens to get it up before the Senate. Then, they had a strong battle over the amendment itself. But, it was adopted. The result was somewhere between $26 billion and $28 billion—not million—but billion went to all of the States; raising all the boats, because the tide was raised. If you have an infusion of somewhere between $26 billion and $28 billion, that raises the tide.

Now, part of the reason that we provided highway funding guarantees in TEA–21 was to give the States a predictable flow of money from the trust fund. And now it is being proposed to upset this predictability by taking more than $1.3 billion—that sounds like about $1.30 for every minute since Jesus Christ was born—$1.3 billion that the States are expecting to send to other priority initiatives.

How do you explain this proposal, Mr. Secretary? With all due respect to you, and I love you, how do you explain this proposal to the nation's governors and the nation's highways commissioners?

Secretary SLATER. Well, Senator, you have actually come back to really what has been a matter of concern voiced by many of your colleagues. And as I recall, you actually led in putting the issue on the table, and appropriately so, because, as you have noted, you were really, along with your colleagues, a principal player in bringing the balance to the measure that passed—TEA–21. It was quite a historic piece of legislation.

We would argue that the predictability is still there; that our focus is primarily on that amount that comes in, in excess of projections. Although there was language in TEA–21 to address that possibility, that is where the focus is.

This year it is projected to be about $3 billion, let me just say that. Last year, it was a considerable amount. This year, about $3 billion.

Last year, we actually proposed using it in many different ways, and using much, much more of it. In this instance, we are really focusing on about a third of it, maybe even a little less. I think our total number is about $741 million.

So, we have really tried to take into account the sensitive nature of what we are proposing, and also the fact that there was that delicate balance that we participated in. We recognize that and

commend it and support it. But again, we are talking about that which is in excess of the projection. And this year we are talking about a much smaller amount of that.

As we propose using the $741 million in a certain way, the ways that we are suggesting are consistent, pretty much, with the themes of TEA–21. The only area where there is probably sort of a hard departure, would be as relates to high-speed rail, because, there we tried to make it eligible as an item for funding under TEA–21, giving the States the ability to do that. We did not carry the day on that point. So, we acknowledge that.

But that is probably the most significant departure from what was proposed in TEA–21. Everything else pretty much matches what was proposed in TEA–21. TEA–21 dealt with economic development.

Our belief is that the Delta Regional Program that we are proposing, about $69 million, and the Native American Lands Program that we are proposing, are consistent with the spirit of TEA–21; especially when you consider that it deals with hard-pressed regions of the country, much like Appalachia.

Senator BYRD. But you're cutting Appalachia. That is not consistent with—is it, with the policy is it?

Secretary SLATER. Well, again, we are dealing with the excess that goes beyond the projection. But I think you make a good point, Senator. And as we go forward, I think we need to really address that particular of the question. So, I think you make a very good point, there.

The other areas deal with increases in safety. It is really trying to add more to certain categories. That is right. But those categories are categories that are reflected in TEA–21.

And the only area where you may have a major departure would be with our desire to ensure that once we unveil high-speed rail in the northeast corridor, that we have a foundation for a similar corridor or a similar series of corridors around the country. That is probably the area where we have the sharpest departure from the specific items mentioned in TEA–21.

MISSISSIPPI DELTA AND APPALACHIA

Senator BYRD. Mr. Secretary, I support the Mississippi Delta Program. I do not see why we need to cut back on Appalachia. Why can we not move forward on both?

Secretary SLATER. That is a good——

Senator BYRD. If we want to improve safety, then let us finish those Appalachian corridors. Instead of having two-lane corridors, which are a sure prescription for accidents and fatalities, we need to have four-lane divided highways.

Secretary SLATER. Right.

Senator BYRD. That includes a very important safety project.

Secretary SLATER. Well, Senator Byrd, we are in agreement there. I remember, in 1995, when we were dealing with the designation of the National Highway System, with your support, we actually got a much stronger commitment to complete the job of the Appalachian Highway System. And I think we are making considerable progress. That is why I am so sensitive, frankly, to the point that you raise.

Why, if the focus for the Delta Program and the program for Native American lands, if the objective there is to do as we are doing with the Appalachian region, why would you take from that region to do this? I think that is a very good point. We should figure out how we address it, as we go forward.

Senator BYRD. Well, you are not just proposing to reallocate the $3 billion in excess projections. You are proposing to reallocate funds within the core highway program. Actually, you are proposing to change TEA–21.

Secretary SLATER. That is a good argument. But we would argue that what we are proposing is still consistent with TEA–21. We have tried to cut it back to make it less onerous, burdensome for some, but our focus, again, is on $741 million; the remainder, roughly $2.3 billion, that would continue to flow through the formulas as prescribed in TEA–21. And that, then, goes to, primarily, highways, some transit, but it flows through the formula.

Senator BYRD. I consider Amtrak an important national asset for our transportation system.

I am not persuaded by your argument.

Secretary SLATER. Yes, sir.

Senator BYRD. But, my time is limited. And I am going to shift, now.

Secretary SLATER. Okay.

Senator BYRD. I respect you for your argument, but you really have to argue the President's case for him. I understand that. I know your heart is not there in the coffin with Caesar. Your heart is with me. You really want to build that Appalachian System, but I understand the constraints that you have to live under. I respect you for that.

AMTRAK

I consider Amtrak an important national asset. The cost of traveling on the Cardinal is considerably cheaper than the airfares available to my constituents.

Secretary SLATER. Right.

Senator BYRD. The airfare cost is about $659 for a round-trip to West Virginia; perhaps, above $700. I suppose you can go to London and back for much less, but you can certainly ride Amtrak for much less.

Secretary SLATER. Right.

Senator BYRD. Yet, you can go from here to White Sulphur Springs for less than $90; maybe just a little over $90, on Amtrak, but it is $600-plus to go by plane.

You noted that the Amtrak ridership increased substantially the last year.

Secretary SLATER. Right.

Senator BYRD. You are requesting funds for new high-speed rail corridors around the country. Are you concerned that Amtrak will struggle to absorb this $50 million reduction in direct support this coming fiscal year?

Secretary SLATER. No. We believe that they can—that what we have proposed for Amtrak is sufficient. I think the amount of $521 million, plus the expanded program dealing with high-speed rail of about $468 million is sufficient.

It is our belief we have provided an amount that is consistent with the 5-year plan that Amtrak put together towards self-sufficiency. We feel comfortable that they can manage with the amount that we proposed.

Senator BYRD. I understand there has been a delay in the delivery of Amtrak's new high-speed train sets.

Secretary SLATER. That is right.

Senator BYRD. These new trains are supposed to be used in the northeast corridor. Amtrak is depending on these new trains to generate substantial revenue next year. If the high-speed trains continue to be delayed, is it possible that the Administration will have to revisit its budget request of $521 million in direct support for Amtrak?

Secretary SLATER. We probably would not revisit that question in this round, but clearly, we are concerned about the Acela Express Service coming online as soon as possible. Our highest concern is that of safety. And that has been the real issue here.

As things stand, currently, the delay has not adversely impacted—or irreversibly—let me say it that way—impacted Amtrak to such an extent that we would have to make a request of that type at this time. We still feel good about the request of $521 million.

We are hopeful, as relates to the request, for high-speed rail support around the country through our expanded request of $468 million, but we continue to monitor the situation with the Acela Service very closely. And we do not want to go through the complete year without the benefit of that service.

I thought Senator Lautenberg—I made a note of his comment that they have already seen a 45 percent increase in ridership with the Acela Regional Service. And that does not even get to the 150 miles-per-hour service that we are looking forward to.

So, there is that desire out there. We can tap it, but you have to have the service online to do so.

REROUTING TRAIN SERVICE

Senator BYRD. Mr. Secretary, the Cardinal has had a very difficult time with its on-time performance over the last several months.

Secretary SLATER. Right.

Senator BYRD. One solution that has been proposed is to reroute the train around Chicago to avoid areas of congestion with freight traffic. This proposal would require the cooperation of many of the impacted freight railroads. Will you look into that situation?

Secretary SLATER. I will.

Senator BYRD. Could your office, perhaps, play a role in working with the freight railroads to allow this rerouting proposal to go forward?

Secretary SLATER. Yes. Senator, I will look into it. And we will respond to you regarding the results of our inquiry.

TIMELY RAIL SERVICE

Senator BYRD. The Norfolk Southern and CSX Railroads took over Conrail this past summer.

Secretary SLATER. Right.

Senator BYRD. And since that time, we have experienced an increased number of delays in the MARC Commuter Rail Service, along the Brunswick line, between Martinsburg and Washington, DC.

In my office, there is a young lady who commutes from Shepherdstown, WV, over to Washington, DC, and she is here everyday.

Secretary SLATER. Is that right?

Senator BYRD. She gets off the train down at the station, here; walks to the office. Every afternoon, at 5 o'clock, she leaves the office to catch the train that goes back to WV. She picks up her automobile at Brunswick, MD or one of the WV stops. And she has been doing this for 8 years. And I will put her absentee record against almost anybody else's. She is there all the time; very dedicated.

But I hear about this problem she has. Along with that, I hear from other constituents. The inclement weather over the last few months has, of course, been a factor.

Secretary SLATER. Right.

RAIL MERGERS

Senator BYRD. These delays have impacted a considerable number of West Virginia residents who live in the panhandle of West Virginia and commute to Washington, D.C., daily.

Now, would you please comment on the dislocations that were created by that merger, and what the department has done to try to minimize them?

Secretary SLATER. Well, Senator, first of all, quality transportation services is nothing, if it is not on time. We are really working to address that issue of efficiency and timeliness across the transportation spectrum—aviation, clearly. We talk about Amtrak here, but even Metro service. And we are actually using technology to help us in that regard.

Having said that, let me say that, more and more, we are finding that there is the challenge of providing timely commuter service, passenger service, and timely freight service when they have to share, in many respects, the same track.

But this is something that we can address, and address effectively; and I think, address to the satisfaction of all concerned. Because, again, at the core of quality transportation is that issue of safety, but it is also timeliness and service. And so, you have to have that addressed, and addressed effectively.

We are working on that. What we would like to do, maybe, in that regard, since this is clearly an issue of concern to the committee, is to continue to keep you informed as we work on this question.

As relates to the broader issue that you raised regarding the Norfolk Southern and CSX merger and the acquisition of Conrail, let me say, in dealing with that question more specifically, that we have really seen a total transformation of the rail industry during these mergers and reconfigurations, over the last decade or so. I mean, it has really been remarkable.

I remember when I talked to Secretary Peña, early on, about key issues that I should be mindful of and issues that he had wrestled

with and knew that were still there to be dealt with; this was the number one issue that he raised.

Senator BYRD. Mr. Secretary, you would make a great Senator. You would be excellent in the case of a filibuster.

Secretary SLATER. A filibuster. All right. Thank you.

Senator BYRD. You really have not answered my question. I am going to go on to——

Secretary SLATER. Let me—what were the specifics of—I was about to get to it, I thought.

Senator BYRD. My time is running out. One other question.

Secretary SLATER. We are talking about time, too. My apologies.

Senator BYRD. One brief question, here.

Secretary SLATER. Okay.

Senator BYRD. But you did fine. I will give you a 100 percent on the effort.

Secretary SLATER. Okay. Thank you.

Senator BYRD. But I am a careful listener. I know when my question is not being answered. We had a discussion about that last year, did we not?

Secretary SLATER. Yes, we did.

RAIL SIGNALING SYSTEMS

Senator BYRD. I am told that there may be an opportunity to improve the signaling system between Martinsburg and the Maryland State line, in order to minimize the conflicts between freight trains and commuter trains along the Brunswick line.

Secretary SLATER. Right.

Senator BYRD. I would appreciate it if your experts at the Federal Railroad Administration and the Federal Transit Administration could look into this proposal.

Secretary SLATER. We will do that.

Senator BYRD. Would you?

Secretary SLATER. It would be a good thing to do, sir.

Senator BYRD. I hoped we could count on your assistance for that review.

Secretary SLATER. Okay. Thank you.

Senator BYRD. Now, Mr. Chairman, I thank you for your patience.

Senator SHELBY. Sure.

Senator BYRD. If I have further questions, I will submit them for the record.

And thank you, again, Mr. Secretary.

Secretary SLATER. Thank you, sir.

Senator SHELBY. Thank you, Senator Byrd.

Mr. Secretary, I want to touch on a couple of more things——

Secretary SLATER. Okay.

EMERGENCY RELIEF

Senator SHELBY [continuing]. On something Senator Byrd mentioned in his opening statement. I find it interesting that you propose to increase the Emergency Relief Highway Program from the TEA–21 firewall amount of $100 million to $498 million, we have been told, to address the emergency highway backlog. While I

think that more emergency money should have been provided in TEA–21, I agree with you on that.

I question how equitable it is to take the firewall account, which already requires a 12.9 percent reduction, because the TEA–21 authorization did not deliver on what it authorized, and reduce the amounts that will go to every State further, in order to fund an emergency program that any observer should have known was undercapitalized in the authorization.

My question is: Why did you not pay for the increase in Emergency Relief Highway Program out of the general funds, out of RABA, or submit a supplemental request? What are the options, there?

Secretary SLATER. Well, I think we have actually had the $100 million amount pool since fiscal year 1973 or so. It is clear that that amount is not sufficient. We always have to come back either for supplementals or do something, as we are proposing now; figure out some way to make it a part of a budget request where we seek the resources.

What we are trying to do here, ultimately, is to take care of a backlog, but also deal with what I think we agree is a problem, and that is the limitation that we all face of having just $100 million in that fund on an annual basis.

That is what we are really trying to do in the long-term, here; figure out some way of providing a bigger pool of resources, so that we can deal with these challenges as they come up, over time.

FAA RECEIPTS AND INTEREST

Senator SHELBY. I understand. Mr. Secretary, wouldn't your budget request for the FAA be more than funded by the receipt and interest in your user fee proposals than from the Airport and Airways Trust Fund?

Secretary SLATER. Do you mean, based on our proposal——

Senator SHELBY. Yes.

Secretary SLATER [continuing]. Would we actually be collecting more than we need?

Senator SHELBY. Yes. Would not your budget request for the FAA be more than funded by the receipt and interest in your user fee proposal than from the Airport——

Secretary SLATER. We do not think so.

Senator SHELBY. Why? You mention $300 million more that would be necessary to meet the budget. Is that about right?

Secretary SLATER. Well, we do not think so.

Senator SHELBY. You do not think so.

Secretary SLATER. We do not think so. Now, having said that, we do know that we have the challenge before us of coming up with a cost accounting system.

Senator SHELBY. Do you want to check the figures?

Secretary SLATER. Yes. We can do that.

Senator SHELBY. That would be good.

Secretary SLATER. All right.

Senator SHELBY. Because, sometimes, you might be right and you might be wrong. And I do not know.

Secretary SLATER. Okay. Well, we can——

Senator SHELBY. We have some problems.

Secretary SLATER. Okay. We will look into it.

Senator SHELBY. And provide it for the record.

[The information follows:]

If we are considering existing taxes and interest, those sources of income total $10.456B and are $766M below our request of $11.222B for FAA programs in fiscal year 2001. If we include the new user fees (with a related minor decrease in interest), the total income is $11.410B, which is $188M above our request of $11.222B in fiscal year 2001.

Secretary SLATER. Yes. And Senator, if I may say, for the record, that we do understand the challenge we face when it comes to putting together a cost accounting system to really deal with the kind of credibility you have to have when you institute a user fee program. Administrator Garvey is doing a good job in that regard. And I think we have enjoyed some success, but we have some ways to go.

Senator SHELBY. Mr. Secretary, as usual, you have been very receptive to us, and you know how to work with us, and we have worked with you on a lot.

Secretary SLATER. Yes.

Senator SHELBY. So, I do not want you to think that we have exhausted all the questions. I know Senator Byrd has probably got some, and Senator Lautenberg, and Senator Stevens, and other members, we have about the budget submission.

Secretary SLATER. I understand.

Senator SHELBY. But we will save the technical and budget questions for the record. We want to thank you for your time today; for your patience.

Secretary SLATER. Thank you.

CLOSING REMARKS

Senator SHELBY. And having said that, this subcommittee will now be in recess until Thursday, February 24, at 10 a.m., right here in this room, where we will discuss Department of Transportation Safety Initiatives.

Secretary SLATER. Okay. Mr. Chairman——

Senator SHELBY. Yes.

Secretary SLATER [continuing]. Can I do one thing before we close the budget——

Senator SHELBY. Go right ahead.

Secretary SLATER. Senator Stevens asked a question that was specific; I think, in some way, related to a question that you had an interest in. It deals with the issue of providing resources for the monitoring of the Alaska——

Senator SHELBY. Right.

Secretary SLATER [continuing]. Volcano issue. I have a specific answer. One reason we did not put it in our budget is that it is our understanding that the U.S. Geological Survey has budgeted $3.5 million for sustaining this operation in their fiscal year 2001 budget.

If that amount is insufficient for this year's costs, then we commit to work with the committee to resolve this question. I actually saw it while I was on a trip to Alaska with the Senator. So, I know about it. It is a matter that we are interested in. But it is our un-

derstanding that the U.S. Geological Survey has actually made the budgetary request to address it.

Senator SHELBY. But, basically, we will work it out either way——

Secretary SLATER. We will work it out.

Senator SHELBY [continuing]. Our both ways.

Secretary SLATER. That is right. We will work it out.

Senator SHELBY. Thank you. Thank you.

Secretary SLATER. We will work it out.

ADDITIONAL COMMITTEE QUESTIONS

Senator SHELBY. Senator Byrd will have some other questions.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

DISCRETIONARY PROJECT EARMARKS

Question. There are several programs under which the fiscal year 2000 transportation appropriations bill identified specific projects, and some of these programs have not yet made grant release announcements. When can the Congress expect Department of Transportation grant announcements for the remainder of the discretionary grants under the Federal Lands program and the Ferry Boats and Facilities program, and for the Transportation and Community and System Preservation program, Job Access and Reverse Commute Grant program, National Corridor Planning and Development program, and Intelligent Transportation Systems program?

Answer. There were 17 Public Lands Highways and 6 Ferry Boat earmarked projects for which the States had not submitted applications. By law, FHWA cannot allocate funds for these programs unless they have an application from the State. FHWA has now received most of the applications from the States for those projects; allocations will be announced shortly.

For the Transportation and Community and System Preservation Pilot Program, the selections have been made, and were announced on March 18. The announcements for the National Corridor Planning and Development Program will be made in March or April.

The fiscal year 2000 appropriations act designated 75 locations, 17 States, and 58 local jurisdictions to receive funding under the Intelligent Transportation Systems Deployment programs. Guidance for developing project proposals was released to local jurisdictions on November 17, 1999 and to State Offices on February 25, 2000. The project proposals will be reviewed by the Department to ensure that they meet the project selection requirements contained in the TEA–21 program authorization. The grant release announcements are expected beginning in May.

For the Job Access and Reverse Commute Program, the Federal Transit Administration issued its solicitation for fiscal year 2000 projects on March 10, 2000. The notice calls for projects specifically designated by Congress to be submitted no later than 60 days following the announcement, and projects for competitive selection to be submitted no later than 90 days. Congressionally designated projects may be announced as soon as FTA reviews the application and determines compliance with all standard grant requirements and conformance to the Congressionally mandated criteria for the program. FTA expects to announce the competitively selected projects before the end of the fiscal year.

DISCRETIONARY BRIDGE

Question. Please provide a list of all bridges eligible for discretionary bridge funding for which the agency has (or expects within the next fiscal year) an application. Please indicate whether such bridge is eligible for discretionary bridge funding or any other discretionary programs administered or funded by the Department of Transportation.

Answer. The following table lists bridge candidate projects that were considered for fiscal year 2000 funding under the Discretionary Bridge Program. The table indicates which projects were funded. Bridge projects on the Interstate system costing over $10 million and ready for construction within one year of the allocation would

also be eligible for Interstate Maintenance discretionary funds. The table also indicates which projects satisfy these conditions. The States' applications do not include enough information to determine those projects that may also be eligible for Public Lands or Borders and Corridors funding.

CANDIDATES FOR THE DISCRETIONARY BRIDGE PROGRAM

[Fiscal year 2000]

State	Project	Comments
Seismic Retrofit Candidates:		
California	Golden Gate Bridge	Eligible—funded with fiscal year 2000 DBP funds.
Tennessee and Arkansas	Hernando Desoto Bridge	Eligible—funded with fiscal year 2000 DBP funds.
Washington	Spokane Street Over-crossing	Meets rating factor criteria (40.7), but did not meet eligibility criteria for funding in fiscal year 2000 (would not begin construction until the 4th quarter).
Nonseismic Candidates:		
Continuing projects (Partially funded in previous years):		
Michigan	Dequindre Yard	Eligible—funded with fiscal year 2000 DBP funds. Also eligible for IM discretionary.
Missouri	Chouteau Bridge	Eligible—funded with fiscal year 2000 DBP funds.
Tennessee	Loudon City Memorial	Eligible—funded with fiscal year 2000 DBP funds.
Washington	Snohomish River Br.	Eligible—funded with fiscal year 2000 DBP funds.
South Carolina	Grace Memorial Bridge	Not Funded in fiscal year 2000—Did not meet eligibility criteria for funding in fiscal year 2000 (would not begin construction until the 4th quarter).
Olympic Cities Projects:		
Utah	Kimballs Jct. Bridge	Eligible—not funded in fiscal year 2000—unfavorable rate factor of 59.5. Also eligible for IM discretionary.
Utah	Silver Creek Jct.	Bridge Eligible—not funded in fiscal year 2000—unfavorable rating factor of 59.7. Also eligible for IM discretionary.
Other Non-seismic Projects:		
New Mexico	I–25 /I–40 Interchange	Eligible—funded with fiscal year 2000 DBP funds. Also eligible for IM discretionary.
Illinois	Wacker Drive Viaduct	Eligible—funded with fiscal year 2000 DBP funds.
Kansas	Turner Diagonal Bridge	Eligible—earmarked in H.R. 2084 Conference Report and funded with fiscal year 2000 DBP funds.
West Virginia	Williamstown-Marietta Bridge	Eligible—earmarked in H.R. 2084 Conference Report and funded with fiscal year 2000 DBP funds. Also eligible for IM discretionary.
New York	North Grand Island Bridge	Eligible-not funded.[1]
Minnesota	Ford Bridge	Eligible-not funded.[1]
New York	Stutson Street Bridge	Eligible-not funded.[1]
Michigan	Grand Rapids (R07)	Eligible-not funded.[1]

CANDIDATES FOR THE DISCRETIONARY BRIDGE PROGRAM—Continued

[Fiscal year 2000]

State	Project	Comments
New Hampshire and Vermont	Rt. 9 over Connecticut River	Eligible-not funded.[1]
Rhode Island	Washington Br. Over Seekonk River	Eligible-not funded.[1] Also eligible for IM discretionary.
Michigan	Grand Rapids (R06–1)	Eligible-not funded.[1]
Michigan	Grand Rapids (R06–2)	Eligible-not funded.[1]
Texas	Sabine River Bridge	Eligible-not funded.[1] Also eligible for IM discretionary.
New York	Ridge Road over Railroads	Eligible-not funded.[1]
Mississippi	Jourdan River Bridge	Eligible-not funded.[1] Also eligible for IM discretionary.
Massachusetts	Hadley Bridge (Calvin Coolidge Mem. Bridge)	Eligible-not funded.[1]
West Virginia	Star City Bridge	Eligible-not funded.[1]
Massachusetts	Fall River Bridge	Eligible-not funded.[1]
New York	Marcy Ave. Ramp	Eligible-not funded.[1]
New York	Manhattan Bridge	Eligible-not funded.[1]
Mississippi	Pascagoula River Bridge	Eligible-not funded.[1]
Missouri	Lexington-Missouri River Bridge	Eligible-not funded.[1]
Massachusetts	Fitchburg Bridge	Eligible-not funded.[1]
Alaska	Kenai River Bridge	Eligible-not funded.[1]
Texas	Trinity River Bridge	Eligible-not funded.[1]
Alabama	Clement C. Clay	Did not meet eligibility criteria for funding in fiscal year 2000 (would not begin construction until the 4th quarter).
Florida	Royal Park Bridge	Did not meet eligibility criteria for funding in fiscal year 2000 (would not begin construction until the 4th quarter).
Kentucky	Burnside-Monticello Bridge	Did not meet eligibility criteria for funding in fiscal year 2000 (would not begin construction until the 4th quarter).
Maryland	Woodrow Wilson Bridge	Did not meet eligibility criteria for funding in fiscal year 2000 (would not begin construction until the 4th quarter).
Projects Earmarked in Fiscal Year 2000 Conference Report, House Report 106–355:		
Florida	Florida Memorial Bridge	Did not meet eligibility criteria for funding in fiscal year 2000 (would not begin construction until 2004 or later).

New Jersey	Witt-Penn Bridge	Did not meet eligibility criteria for funding in fiscal year 2000 (would not begin construction until 2004).
Arizona and Nevada	Hoover Dam	Not eligible—not a bridge replacement project (it is a bypass around the Dam).
Alabama	Naheola Bridge	Not eligible—not a highway bridge.
Vermont	Union Village/Cambridge Junction Bridges	Not eligible—project cost less than $10 million.
Mississippi	US82 Mississippi River Bridge	Not eligible—bridge rating factor greater than 100.
Texas	Paso Del Norte International Bridge	Not eligible—project cost less than $10 million.
Kansas	Turner Diagonal Bridge	Eligible—funded with fiscal year 2000 DBP funds.
West Virginia	Williamston-Marietta Bridge	Eligible—funded with fiscal year 2000 DBP funds.

[1] These projects were eligible for funding, but because of the limited amount of discretionary bridge program funds available for non-seismic projects ($65 million), they were not selected for funding.

Note: Only two candidates who submitted applications for fiscal year 2000 funds were well qualified according to the eligibility criteria. The Golden Gate Bridge and the Hernando Desoto Bridge are continuing projects and have received seismic retrofit discretionary funds in previous years. The Hernando Desoto Bridge is in the New Madrid Fault region.

EMERGENCY RELIEF HIGHWAYS

Question. The budget proposes an increase in the Emergency Relief highway program from the TEA–21 firewall amount of $100 million to $498 million to address the emergency highway backlog. While I think that more emergency money should have been provided in TEA–21, I question how equitable it is to take the firewalled account—which already requires a 12.9 percent reduction because the TEA–21 authorization didn't deliver on what it authorized—and reduce the amounts that will go to every state further, in order to fund an emergency program that any observer should have known was undercapitalized in the authorization.

Why didn't you pay for the increase in the Emergency Relief highway program out of General Funds, out of RABA, or submit a supplemental request? Were these alternatives considered as the Department put together its budget? Please provide a short analysis of each of these alternatives, as well as an other alternatives considered by the Department and Office of Management and Budget as you considered how to address the Emergency Relief highways funding shortfall.

Answer. The Department reviewed a number of options for addressing the backlog of emergency relief needs, including a request from the General Fund, RABA, or supplemental appropriations. Although these methods would provide funding to meet the most immediate needs for emergency relief, they do not address the underlying cause of this crisis. The $100 million in emergency relief provided each year since fiscal year 1973 is clearly not sufficient for the level of need. The Emergency Relief Reserve Fund will provide a long-term solution, and FHWA believes will prevent another crisis from developing. The $398 million of additional contract authority reflects the ten-year average of Emergency Relief supplementals, excluding Loma Prieta, plus sufficient funds to pay off the current balance over three years.

FAA CONTRACT TOWERS

Question. It is the Committee's understanding that DOT may propose to cut off funding for nearly half the contract towers across the country in a couple of months. The contract tower program is very important from an aviation safety perspective, and it's providing significant air traffic control cost savings. In fact, audits by the DOT Inspector General validate the important benefits of the program and suggest it might make sense to expand it.

Why is the Department even considering a funding reduction for the contract tower program? Please explain why DOT may propose action that could adversely affect aviation safety and will penalize a program that is solidly justified from a cost/benefit standpoint?

Answer. The FAA is facing a shortfall in its operating budget this year. That is why the Administration has proposed fiscal year 2000 supplementals with the fiscal year 2001 budget; the supplementals would allow the shifting of some costs currently being borne by the Operations appropriation.

No decisions have been made yet on the canceling of contract tower services. Obviously, DOT does not want to reduce funding for this program and hopes that Congress will provide the supplemental funding to ensure continued operations. The contract tower program is assumed fully funded in the FAA budget request for fiscal year 2001.

FAA PERSONNEL AND PROCUREMENT FLEXIBILITY

Question. A few years back, the Congress granted the Federal Aviation Administration substantial latitude in personnel and procurement matters. Is it your understanding that the personnel authority that Congress granted the FAA has limited that agency in any way in enacting any operational or management reforms?

Answer. On the contrary, the personnel reform authority has played a key role in supporting a variety of management reform efforts within FAA aimed at improving how the agency operates in a more business-like fashion. For example, the new compensation programs being piloted in FAA link pay adjustments to organizational and individual performance, which directly supports FAA's establishment and measurement of annual outcome-based, mission-focused performance goals and indicators. A fundamental objective of FAA personnel management changes, particularly in relation to compensation programs, is an increased emphasis on improvements in organizational performance and increased efficiency of operations.

TRANSIT NEW STARTS

Question. The fiscal year 2000 budget request included seven "proposed" full funding grant agreement (FFGA) projects, which you expected to approve before the end

of fiscal year 2000. We are halfway through fiscal year 2000—how many of those projects have actually received an FFGA?

Answer. FTA entered into a FFGA with Dallas for construction of the North Corridor LTRT project on October 6, 1999. Three projects, Fort Lauderdale, San Diego Mission Valley East and Newark Elizabeth MOS–1 are ready to be executed and will be submitted to the Congress for 60-day review very shortly. The Memphis Medical Center Extension underwent significant scope changes and funding increases. Thus, it was re-rated and is now proposed for an FFGA in fiscal year 2001. The Salt Lake City Downtown segment has been withdrawn and an extension of the North South LRT to the University is proposed in the fiscal year 2001 budget. The Orlando I–4 Central Florida LRT Project was also withdrawn from consideration because of loss of local financial support.

Question. Why is the Department constricting the new starts pipeline with projects that are not yet ready to move forward to a full funding grant agreement?

Answer. The projects proposed for full funding grant agreements in the President's budget will all be ready to enter into FFGAs by the end of fiscal year 2001 and in fact several could move ahead much faster. If these projects have no outstanding issues, FTA should be able to approve the entry of these projects into final design by the summer of 2000. This is a stricter test than was applied in the proposals made for fiscal year 2000, which were based on projects which were expected to have completed a record of decision by September 30, 1999 (and thus to be in final design by December 31, 1999). FTA is applying a stricter test this year to assure that no project issues are outstanding which could delay the project further or cause major changes in project cost, such as engineering concerns, right of way issues, project management planning concerns, environmental issues, or permitting issues.

Question. The demand for new starts funds is extraordinarily high, and transit agencies around the country are in varying stages of development, working toward securing that magic piece of paper, a full funding grant agreement, which most projects need in order to secure financing for the substantial capital investments that are required to build or expand a transit system. You have requested funding for 15 new proposed full funding grant agreements, which you expect to enter into in fiscal year 2001. Please prepare a table addressing the following questions. How much commitment authority over the life of the authorization was included in the TEA–21 firewall? How much of this commitment authority was "pre-committed" to existing FFGAs at the time TEA–21 was passed? How much of that commitment authority has been committed to projects since the enactment of TEA–21 through the present (middle of fiscal year 2000)?

Answer.

Federal Transit Administration TEA–21 Authorization Table

[In millions]

Available TEA–21 Authority-Guaranteed Level [$6,092.40] + Contingent Commitment [$2,350.80]	$8,443.20
Existing commitments:	
Remaining ISTEA FFGA Commitments [Fiscal year 1998-Post 2003]	3,787.50
PMO takedown [Fiscal year 1998–2003]	42.28
Alaska and/or Hawaii Ferry Boat set-aside [Fiscal year 1998–2003]	51.48
Other appropriations [Fiscal year 1998–2000]	860.49
Other than final design & construction [8 percent—fiscal year 2001–2003]	272.73
TEA–21 commitments	296.45
Total	5,310.93
Remaining Commitment Authority	3,132.27

Question. Is it correct that, were all the new start transit projects that are included in the budget request to enter into FFGAs with the FTA during fiscal year 2001, all the commitment authority that was authorized in TEA–21 would be committed, leaving no uncommitted funds available for new full funding grant agreements before the end of fiscal year 2003?

Answer. Yes. The FTA expects that the FFGAs proposed would consume all of the commitment authority available under TEA–21. New funding commitments could be made only if non-guaranteed funds were appropriated under the authorizations provided by 53 USC § 5338(h) or if additional commitment authority were authorized.

Question. How do you think the other 70 or so authorized new start projects that are currently in alternatives analysis or preliminary engineering are going to react

to a budget proposal that completely cuts them out of the running for a full funding grant agreement before fiscal year 2004?

Answer. Some of the project sponsors would be disappointed that commitments could not be made until later. However, other sources of funding are available such as formula funds, flexible funds available from the Federal Highway Administration, and loans or loan guarantees under the Transportation Infrastructure Finance and Innovation Act (TIFIA) provisions of TEA–21. The projects proposed in the fiscal year 2001 budget are those which will be ready in fiscal year 2001 for an FFGA. The Department believes it is better to allow the worthy projects among those which are ready to proceed now, with a federal commitment, than to wait for other projects to develop further.

LOS ANGELES BUS REQUEST

Question. The budget includes a request for $50 million for Los Angeles County MTA to buy new buses, in order to implement the bus consent decree ordered by the Special Master. The judicial process associated with the consent decree litigation is ongoing and complex. It is my understanding that a stay has been granted by the Ninth Circuit Court of Appeals, while an MTA appeal of the decree is pending. Doesn't a federal budget request for funding to implement the bus consent decree pre-judge the results of this ongoing judicial process?

Answer. Los Angeles MTA Accelerated Bus Procurement Program established new bus quantities through fiscal year 2004 of 2,095 new buses. For fiscal year 2001 their program assumes purchase of 400 new buses. However, the Special Master requested that Los Angeles MTA procure 297 additional new buses beyond the Accelerated Bus Program with delivery as soon as possible and at least 88 additional vehicles in service by January 3, 2000.

In late November 1999, the U.S. Ninth Circuit Court of Appeals issued an order, granting MTA's request for a temporary stay of the court order. The Appeals Court set an expedited schedule for filing of legal briefs in December and January, but no date was set for oral arguments on MTA's appeal. MTA believes that the accelerated bus procurement program to buy 2,095 new buses by 2004 will be sufficient to meet the agreed load factors. Even with the recent stay of the court order, the MTA is addressing the possible purchase of the additional 297 buses through current bid procurements and flexible options.

FTA believes that MTA's general need to purchase buses to relieve overcrowding and expand service is a legitimate expenditure of federal funds. Regardless of the ultimate resolution of the appeal, Los Angeles MTA will still need to aggressively purchase a significant number of buses in order to relieve any disparity in the level of services provided throughout the community.

Question. Did Los Angeles MTA request this level of federal bus funding? Do you know whether the MTA has included funding in its 2001 operating budget for the required 20 percent match for these funds?

Answer. In discussions last year with Los Angeles MTA over plans to replace its bus fleet of aging vehicles, to provide reliable transit service, and to meet the pending requirements of the Special Master's Decision, FTA committed to seek up to $50 million in fiscal year 2001 to assist MTA in meeting these goals. Los Angeles MTA advises that the matching funds are included in their 2001 operating budget.

Question. What does the Los Angeles MTA expanded bus procurement plan assume for capital bus purchases in fiscal year 2001? What does the consent decree, if implemented as it is currently fashioned, require that LA MTA spend on bus purchases in fiscal year 2001? What are the operating cost requirements for both these levels of capital commitment?

Answer. The Accelerated Bus Procurement Program assumed the purchase of 400 new buses in fiscal year 2001 at a cost of almost $157 million. However, the Federal District Court order further accelerated the bus purchases for additional 297 buses at a cost of almost $116 million. This is currently pending before the Federal Ninth Circuit Court of Appeals which has stayed the orders of the District Court and the decisions of the Special Master.

The projected operating cost of the Consent Decree for fiscal year 2001 is over $81 million. This cost does not include any implementation changes that the Special Master's decision may mandate through the current legal proceedings. Should the MTA not prevail in the current legal proceedings, an additional $17 million for bus operations will be necessary to implement the Special Master's requirement for the 88 additional buses.

Question. Can Los Angeles MTA, or any other transit provider, use Section 5309 bus capital funds for "expanded capital" activities that were traditionally considered

operating activities? What are these eligible activities? Are there any restrictions on this expanded use?

Answer. Yes, Los Angeles MTA can use any bus capital funding they receive under section 5309 for preventive maintenance activities as redefined in the fiscal year 1998 Appropriations Act and subsequently in TEA–21. TEA–21 redefined "Capital" to include preventive maintenance activities to more closely align with the definition of capital expenditures allowed under the Federal Highway Administration programs and to help preserve the Federally funded assets.

Bus Capital expenditures can include acquisition or preventive maintenance of buses, maintenance facilities, bus malls, transportation centers, park-and-ride facilities, bus rebuild, bus preventive maintenance, passenger amenities (i.e., passenger shelters), bus stop signs, and miscellaneous equipment. These funds can not be used for typical operating costs such as driver's salaries and fuel.

EXPANDED INTERCITY RAIL CAPITAL

Question. The budget proposes to transfer $468 million from Revenue Aligned Budget Authority for the purposes of making grants to Amtrak, or to a single state or consortium of states, to improve passenger rail service. These funds are in addition to the $521 million for Amtrak capital grants, consistent with the "glide path" to operating self-sufficiency by 2003, which both Amtrak and the administration have committed to. What is the rationale for requiring a 50 percent match if the grant is made to a state or consortium of states, but not requiring any matching funds if the grant is made directly to Amtrak?

Answer. The Administration does not propose to treat Amtrak and States differently under its proposed Expanded Intercity Rail Passenger Fund. The Administration intends to encourage joint applications between Amtrak and a State or consortium of States for funding under this program. Eligible projects must generate a positive financial contribution for Amtrak and positive net benefits for the public. The funding, by law, can only be used to pay for up to 50 percent of a project's total cost. This provision would apply equally to Amtrak or a State grantee. In the case of a grant to Amtrak, the additional funding could come from other company revenues, or a State or consortium of States with which it is partnering.

HAZARDOUS MATERIALS REGISTRATION FEES

Question. On November 4, 1999, Chairman Wolf and I wrote to GAO Comptroller General Walker, requesting that the General Accounting Office perform an evaluation of the Hazardous Materials Emergency Preparedness grants program, which is paid for by registration fees charged to hazardous materials shippers and carriers. Concerns have been raised by some members of the hazmat carriers industry that the same shippers and carriers who pay for the HMEP grants program through their user fees also participate in and pay for well established emergency planning training programs in the private sector. We asked GAO to determine whether the HMEP grants program goals are being met by existing private sector initiatives to identify any duplication of services.

In light of the ongoing GAO study, why has RSPA promulgated a final rulemaking on the hazardous materials registration fee increase (February 14, 2000 Federal Register)? Don't you think it was premature for RSPA to move forward with the assessment of a fee increase when the need for such an increase has not yet been reviewed by an impartial party? Why did the Department make the decision to proceed on this rulemaking while the GAO review in ongoing?

Answer. The increased funding will enhance safety by ensuring that a larger segment of the response community will receive critical initial and recurrent training at all levels, enhancing the extent and quality of planning tools, and improving safety at a level consistent with congressional intent. The ultimate objective of this program is to protect on-scene emergency response personnel at hazmat incidents, and to enable them to more effectively protect lives and property endangered by hazmat accidents. The funds paid through this rule will go directly to fund state Hazmat safety programs, providing increased performance to various response groups—from volunteer fire departments to emergency medical responders and others who may be involved in hazmat response efforts.

A Notice of Proposed Rulemaking was published on April 15, 1999, and public hearings were held in Washington, DC on May 25, 1999 and in Des Moines, IA on June 22, 1999. In written comments and oral presentations. Several industry organizations and associations expressed support for fully funding the HMEP Grants program, although some differed in their preferred approach to achieve full funding.

In the fiscal year 1999 budget submission, the Administration informed Congress of its intent to propose rulemaking to change the annual level of funding for the

Hazardous Materials Emergency Preparedness (HMEP) Grants Program by raising the registration fee and broadening the base of registrants to achieve a more equitable program geared to the risk and amount of hazardous materials being shipped. The final rule was published on February 14, 2000 to ensure adequate time for communicating new requirements to registrants before the new registration cycle begins in July 2000.

COAST GUARD C–130 SPARES

Question. The Coast Guard has expressed concern that operational readiness is eroding. In fact, in a recent speech at the Center for Naval Analysis, the Commandant focused on the reduced availability of C–130s and the lack of spare parts needed to keep them flying to illustrate the readiness challenges the Coast Guard is facing. I asked my staff to look into it, and have been informed that even though Congress fully funded the aircraft maintenance line in the fiscal year 2000 appropriations bill, the Coast Guard reprogrammed funds below the notification threshold from the aircraft maintenance account to pay for "recruitment" activities. Why is the Coast Guard citing lack of readiness in an account that they have dunned in order to pay for another activity?

Answer. The Coast Guard decided that it's mission needs can be best met in 2000 by allocating $43 million to hire several hundred additional active duty Coast Guard personnel above the levels originally requested in the President's fiscal year 2000 budget or funded in the fiscal year 2000 appropriation. The realignment of funds improves Coast Guard fiscal year 2000 readiness by addressing shortfalls in military technicians and maintenance personnel. The fiscal year 2001 budget further improves readiness and operational capabilities. No additional funds are requested in 2000 to backfill for spare parts or other activities the Coast Guard deemed to be lower priorities.

Question. Further, would you respond for the record on whether additional internal reprogramming controls should be established for the Department for instances such as this, or whether we need to revise the congressional reprogramming guidelines to keep the modal administrations from reprogramming below threshold from safety and readiness accounts to fund administrative or "recruiting" activities?

Answer. The Department does not believe that more stringent reprogramming controls are warranted. The reprogramming was not aimed at an "administrative" activity; it was aimed at a root problem affecting the Coast Guard readiness posture.

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

NATIVE AMERICAN INITIATIVE

Question. Senator Slater, I applaud the Administration's Native American initiative. As you know, one of the more important highway programs for my home state of New Mexico is the Indian Reservation Roads program. Of the approximately 22,000 miles of Bureau of Indian Affairs road serving tribal lands, only 11 percent of the paved roads are rated as being in good condition. Funds for Indian Reservation Roads funds are critical to improving transportation for Native Americans.

Please describe the Department's Native American initiative. How much funding is being provided as part of this initiative, and what is included in the Department's budget?

Answer. The Department's budget proposal dedicates $358 million to address the needs of Native Americans. Of this total, $350 million will be used for the FHWA Indian Reservation Roads (IRR) program, including the authorized level of $275 million plus $75 million of Revenue Aligned Budget Authority. The increased funding for IRR will begin to address the backlog of needs, estimated at about $4 billion nationally. The Department's initiative also dedicates $1.2 million from FHWA's On-the-Job Training (OJT) program and another $5 million from FTA's Job Access and Reverse Commute program for projects which benefit Native Americans and Native American Tribes. These programs help connect people to opportunity by providing job skills and critical transportation services. The budget proposes to provide both IRR and OJT with 100 percent obligation authority so that all of the funds will be made available for use.

Finally, the initiative includes $2 million for NHTSA activities which benefit Native Americans. These activities will include improving EMS services on Indian lands, developing safety materials and media campaigns tailored to the Native American community, increasing the number of health and safety professionals who

receive injury prevention training, and providing training and support for local traffic law enforcement on Indian lands.

Question. How will the available funds be distributed?

Answer. Indian Reservation Roads funds are distributed by the Bureau of Indian Affairs (BIA) to their regional offices. BIA distributes funds according to a formula based on relative need which was implemented in 1993. TEA–21 requires the Secretary of the Interior to develop a new formula for fiscal year 2000. However, that process is still under way; and implementation of the new formula is expected in fiscal year 2001.

Tribal governments will be able to apply for the Job Access funds, and FTA will base its decisions on the merit-based criteria described in TEA–21. The Administration has also proposed legislative language that would make it easier for tribal governments to compete for funding by allowing them to apply directly to FTA without having to be selected first by a state.

NONDESTRUCTIVE EVALUATION AND TESTING

Question. Secretary Slater, the Administration continues to put an emphasis on the use of technology in transportation. You know of my interest in the work that is being done by the Aging Aircraft Nondestructive Evaluation Center (AANC), which is supported by the Federal Aviation Administration, and is now a partner in the Center of Excellence for Airworthiness Assurance. This collaboration has been very successful and continues to make progress to ensure greater safety in the civilian aviation fleet.

Mr. Secretary, I remain extremely interested in the work of the Aging Aircraft Nondestructive Evaluation Center in Albuquerque, and for the various components of the Center of Excellence for Airworthiness Assurance program. AANC in Albuquerque has been funded at $3 million per year. I believe the FAA intends to continue this level of support in fiscal year 2001. Is that the case?

Answer. FAA support of the AANC has been $3 million annually. In fiscal year 2001, FAA is requesting a significant increase in the Research, Engineering & Development (R,E,&D) budget that would increase funding for AANC to $5 million. The $2 million increase above previous year's funding would be for research of Aircraft Non-structural Systems (wiring, subsystems, etc).

Question. What is the total budget request for the AANC and the program elements associated with the Center of Excellence in the fiscal year 2001 budget, and how does this compare to the proposed plan for fiscal year 2000?

Answer. AANC's fiscal year 2000 and fiscal year 2001 budgets are $3 million and $5 million respectively. Though AANC is a core member of the Airworthiness Assurance Center of Excellence, it receives funding directly through an interagency agreement between the FAA and the Department of Energy.

Question. Is the request sufficient to support ongoing work? What are the program goals for fiscal year 2000 and fiscal year 2001 under the FAA's plan?

Answer. The fiscal year 2001 budget request of $5 million will support planned research in both structural inspection and nonstructural systems. This level of funding will support the initiatives described below.

The AANC will be maintained as an independent and highly capable inspection validation center that fully supports the needs of the FAA's National Aging Aircraft Research Program and the FAA field offices. In fiscal year 2000, specific structural programs include the completion of a field reliability study of industry procedures for finding subsurface cracks in B–727/B–737 transport aircraft; completion of a validation effort of a safer inspection for commuter aircraft (Metro 226/227 aircraft); and development of an industry accepted set of calibration standards for consistent honeycomb inspections. Planned accomplishments for the Nonstructural Systems Research program include technical support for the Aging Transport Systems Rulemaking Advisory Committee's Intrusive Inspection Project, and completion of circuit breaker testing.

In fiscal year 2001, structural program goals include completion of a validation activity to apply composite patches to metal aircraft (DC–10/MD–11); completion of a corrosion detection experiment focused on B–727/B–737 lap splice joints; completion of a visual inspection experiment to determine the affect of job card instructions on inspection performance. Nonstructural Systems Research will include both aging electrical systems research (degradation assessment of aircraft wire, visual inspection follow-on studies, and validation of wire testing systems) and aging mechanical systems research (destructive testing of flight control linkages, characterization of the 747 testbed aircraft, and assessment of maintenance practices).

Question. The AANC and the Center of Excellence have focused their research and technology development efforts largely on structural aging in view of the cur-

rent fleet of commercial aircraft. The FAA has recognized the nonstructural aging issues as needing to be addressed, for example, the wiring issue. Has the FAA committed any resources to nonstructural work through the Center this year?

Answer. The FAA will be committing $550 thousand to AANC in fiscal year 2000 for Aging Electrical Systems Research.

Question. Can you please tell the Subcommittee what the current nonstructural aging program expects to accomplish in 2000 and how much the FAA intends to commit to this area of research under the fiscal year 2001 budget request?

Answer. The fiscal year 2000 funding will support the Aging Transport Systems Rulemaking Advisory Committee's Intrusive Inspection Project and completion of aircraft circuit breaker testing. In fiscal year 2001, FAA has requested $2 million for nonstructural aging research.

FAA COST-BASED ACCOUNTING SYSTEM

Question. Secretary Slater, during a hearing just one week ago today on modernizing the FAA, both the Inspector General and the FAA Administrator stated that the cost-based accounting system would not be completed until 2002. A cost-based accounting system is the critical element in the development of fees. Why do you assume the collection of new user fees in 2001, when the cost-based accounting system will not be complete?

Answer. The FAA's cost accounting system is being implemented in phases. The first phase, currently underway, is to implement the Air Traffic Services line of business, which accounts for the majority of FAA costs. Other lines of business will be implemented in fiscal year 2001 through fiscal year 2002. FAA has completed work on enroute and oceanic portions of Air Traffic Services, comprising approximately $2.5 billion of fiscal year 1998 costs. Identification of the fiscal year 1999 costs of these services will be completed in March 2000. FAA will also complete work on the cost of Flight Service Stations this fiscal year. In total, all of these services will account for approximately $4.9 billion in agency costs. Since the FAA has valid cost data now for enroute and oceanic services, that information would be available for the establishment of cost-based user fees in fiscal year 2001 for these services.

FAA EXCISE TAXES AND USER FEES

Question. Secretary Slater, the President's budget proposes a new user fee within the Federal Aviation Administration and assumes collection of $965 million in 2001. In 2005, the President's budgetary receipt projections show the proposed fees increasing to $2 billion. The budget specifically states that current aviation excise taxes will be reduced over time as more efficient, service-based charges are phased in. However, your projections do not show a reduction in excise taxes in the out-years. Can you explain this apparent inconsistency?

Answer. Beginning in fiscal year 2002, the budget proposes to set total aviation excise taxes and new user fees equal to the expected FAA operational and capital needs in the subsequent year. The proposed fees increase from $965 million in 2001 to $2 billion in 2005 to reflect phasing in the fees over 2 years. The Budget reflects the total revenues proposed to be collected from the aviation community. This total is not affected by the conversion from taxes to fees.

FISCAL YEAR 2000 ACROSS-THE-BOARD REDUCTION

Question. Secretary Slater, in last year's Consolidated Appropriations Act for fiscal year 2000 (Public Law 106–113), the President and the Congress agreed to an across-the-board reduction of 0.38 percent in discretionary programs as part of an effort to ensure that spending in fiscal year 2000 did not dip into the Social Security surplus. We were successful in that effort, but in the process the Department of Transportation had to reduce the program spending by $179.6 million in fiscal year 2000.

First reports had the Department targeting FAA's Airport Improvement program for the entire reduction, but according to the budget documents that did not occur. Rather, each office and agency took a part of the reduction with most coming from the Federal-aid highway program (−$105.3 million) and the FAA Grants-in-Aid for Airports program (−$54.4 million).

Mr. Secretary, would you please provide the Subcommittee with the program, project, and activity details underlying the across-the-board reductions for each agency?

Answer. The program, project, and activity details follow.

PUBLIC LAW 106–113 REDUCTIONS BY PROGRAM, PROJECT, OR ACTIVITY

[In thousands of dollars]

	Fiscal year 2000		
	Base	Reduction	Adjust base
Federal Highway Administration: Federal-aid Highways (see following table)	27,625,292	−105,260	27,520,032
Federal Railroad Administration:			
Next Generation High-Speed rail: Tracks, structures/technology	27,200	−103	27,097
Rhode Island Rail Development	10,000	−38	9,962
Alaska Railroad Rehabilitation	15,000	−38	14,962
Federal Transit Administration:			
Capital Investment:			
New Starts (see following table)	973,047	−11,197	961,850
Bus (see attached table by PPA)	543,303	−6,206	537,097
Transit planning & research: National program (see following table)	26,600	−243	26,357
Federal Aviation Administration: Grants-in-aid for Airports	1,950,000	−54,362	1,895,638
U.S. Coast Guard:			
Acquisition, Construction, and Improvements: Seagoing Buoy Tender (WLB)	77,000	−1,478	75,522
Alteration of Bridges:			
Florida Ave. RR/HW Bridge, New Orleans, LA	3,000	−29	2,972
Limehouse Bridge, Charleston, SC	1,000	−29	972
Environmental Compliance and Restoration	16,989	−65	16,924
Maritime Administration:			
Operations and Training:			
US Merchant Marine Academy	34,073	−129	33,944
State Maritime Academies	7,000	−27	6,973
Other Operations and Training	31,000	−118	30,882
Title XI Program	6,000	−37	5,963
Saint Lawrence Seaway Development Corp.: Operations and Maintenance	12,017	−46	11,971
Office of Inspector General: Salaries and Expenses	44,616	−170	44,446
Surface Transportation Board: Salaries and Expenses	15,388	−58	15,330
Office of the Secretary:			
Minority Business Outreach	2,900	−18	2,882
Transportation, Planning, R&D	3,227	−10	3,217
Total reduction		179,661	

Federal-aid Highway Program—Treatment of 0.38 Reduction Under the Fiscal Year 2000 Omnibus Appropriations Act

BACKGROUND

The fiscal year 2000 Omnibus Appropriations Act contains a government-wide rescission in the amount of 0.38 percent of the discretionary budget authority provided (or obligation limitation imposed) for fiscal year 2000 for each agency of the Federal government. For the Federal-aid highway program, it has been interpreted that this reduction applies to the Federal-aid obligation limitation.

The Act further provides some discretion in administering the rescission, except that no program, project, or activity of any agency may be reduced by more than 15 percent. The reduction determined for the Federal-aid highway program is $105,260,000, which equates to a 0.38 reduction in the $27.7 billion fiscal year 2000 Federal-aid obligation limitation, i.e., the Federal-aid highway program did not absorb a disproportionate share of the reduction under the broad authority provided.

ADMINISTRATION OF THE 0.38 REDUCTION WITHIN THE FEDERAL-AID OBLIGATION LIMITATION

The Federal-aid obligation limitation is divided among programs and the States based on a multi-step process provided in TEA–21 and slightly modified in section 310 of the fiscal year 2000 DOT Appropriations Act. Under this process, limitation is first reserved, or set-aside, for administrative expenses and programs funded from the administrative takedown authorized by section 104(a) of Title 23, the Bureau of Transportation Statistics, the Highway Use Tax Evasion program, funds provided through Revenue Aligned Budget Authority, and carryover balances for allocated programs from previous years.

The limitation remaining after these initial set-asides is then compared to the total remaining new authorizations of contract authority subject to the limitation for the year. This ratio of total limitation to total authorization (the "limitation ratio") is used in the remaining steps of the distribution to determine how much limitation each program or State receives. For fiscal year 2000, this ratio was determined to be 87.1 percent.

Next, the limitation ratio is used to calculate how much limitation is set-aside for three specially designated programs—High Priority Projects, the Woodrow Wilson Memorial Bridge, and the Appalachian Development Highway System program. Limitation setaside for these programs is available until used. Similarly, $2 billion in limitation is setaside for the Minimum Guarantee program and this limitation is available until used; that is, it is "no-year" limitation.

Again using the limitation ratio, limitation is then set-aside for allocated (not apportioned to the States) programs, except for those discussed above. The amount of limitation each allocated program receives is calculated by multiplying the new authorization for the fiscal year by the limitation ratio. For example, an allocated program authorized at $100 million receives $87.1 million in fiscal year 2000. Discretionary programs such as the Bridge Discretionary program, Transportation and Community and System Preservation program, and Public Lands Discretionary program, are subject to this provision. For fiscal year 2000, Congressional earmarks of discretionary programs contained in the DOT Appropriations Act were reduced by the same ratio as the overall category, i.e., they were funded at 87.1 percent of the earmarked amount. In fiscal year 1999, earmarks in the ITS deployment program, which was fully earmarked, were proportionately reduced. Those in the only other earmarked discretionary category, public lands, were not.

Finally, after these aforementioned set-asides are made, the balance of the limitation is then distributed among the States, with each State's portion of the limitation based on its relative share of apportioned funds for the fiscal year. This "formula" limitation, which amounted to $20.896 billion in fiscal year 2000 prior to the 0.38 percent reduction, is available only until the end of the fiscal year. The $105.260 million reduction for the Federal-aid highway program is being taken from this portion of the obligation limitation, thereby very modestly reducing each State's available limitation used to obligate funds for major Federal-aid programs.

AMENDED FISCAL YEAR 2000 DISTRIBUTION OF OBLIGATION LIMITATION PURSUANT TO THE FISCAL YEAR 2000 OMNIBUS APPROPRIATIONS ACT

[PUBLIC LAW 106–113]

States	Fiscal year 2000 formula obligation limitation	0.38 percent reduction	Revised fiscal year 2000 formula obligation limitation
ALABAMA	384,338,074	1,936,056	382,402,018
ALASKA	207,758,883	1,046,560	206,712,323
ARIZONA	346,390,196	1,744,898	344,645,298
ARKANSAS	272,075,867	1,370,549	270,705,318
CALIFORNIA	1,998,381,178	10,066,599	1,988,314,579
COLORADO	260,133,906	1,310,393	258,823,513
CONNECTICUT	296,960,378	1,495,901	295,464,477
DELAWARE	97,970,572	493,515	97,477,057
DIST. OF COL	91,616,706	461,508	91,155,198
FLORIDA	955,595,725	4,813,696	950,782,029
GEORGIA	702,470,469	3,538,609	698,931,860
HAWAII	106,701,488	537,496	106,163,992
IDAHO	149,935,553	755,282	149,180,271

AMENDED FISCAL YEAR 2000 DISTRIBUTION OF OBLIGATION LIMITATION PURSUANT TO THE FISCAL YEAR 2000 OMNIBUS APPROPRIATIONS ACT—Continued

[PUBLIC LAW 106–113]

States	Fiscal year 2000 formula obligation limitation	0.38 percent reduction	Revised fiscal year 2000 formula obligation limitation
ILLINOIS	716,872,910	3,611,159	713,261,751
INDIANA	483,509,231	2,435,618	481,073,613
IOWA	264,369,118	1,331,727	263,037,391
KANSAS	260,447,308	1,311,971	259,135,337
KENTUCKY	342,824,902	1,726,938	341,097,964
LOUISIANA	333,571,233	1,680,324	331,890,909
MAINE	111,969,808	564,034	111,405,774
MARYLAND	344,534,993	1,735,553	342,799,440
MASSACHUSETTS	385,222,264	1,940,510	383,281,754
MICHIGAN	676,689,106	3,408,738	673,280,368
MINNESOTA	316,828,617	1,595,985	315,232,632
MISSISSIPPI	263,802,026	1,328,870	262,473,156
MISSOURI	525,406,831	2,646,672	522,760,159
MONTANA	203,475,124	1,024,981	202,450,143
NEBRASKA	177,958,007	896,442	177,061,565
NEVADA	149,856,618	754,884	149,101,734
NEW HAMPSHIRE	105,380,514	530,841	104,849,673
NEW JERSEY	565,760,830	2,849,951	562,910,879
NEW MEXICO	204,440,139	1,029,842	203,410,297
NEW YORK	1,060,079,127	5,340,018	1,054,739,109
NORTH CAROLINA	557,184,939	2,806,751	554,378,188
NORTH DAKOTA	144,956,145	730,199	144,225,946
OHIO	725,645,538	3,655,350	721,990,188
OKLAHOMA	338,839,587	1,706,863	337,132,724
OREGON	261,335,465	1,316,445	260,019,020
PENNSYLVANIA	931,243,388	4,691,024	926,552,364
RHODE ISLAND	125,756,677	633,484	125,123,193
SOUTH CAROLINA	341,408,922	1,719,805	339,689,117
SOUTH DAKOTA	150,782,355	759,548	150,022,807
TENNESSEE	443,959,373	2,236,391	441,722,982
TEXAS	1,566,389,699	7,890,495	1,558,499,204
UTAH	172,572,570	869,313	171,703,257
VERMONT	100,862,279	508,081	100,354,198
VIRGINIA	541,523,969	2,727,860	538,796,109
WASHINGTON	390,165,370	1,965,410	388,199,960
WEST VIRGINIA	180,821,517	910,866	179,910,651
WISCONSIN	405,531,698	2,042,816	403,488,882
WYOMING	153,488,536	773,179	152,715,357
TOTAL	20,895,795,728	105,260,000	20,790,535,728

FEDERAL TRANSIT ADMINISTRATION

[Fiscal year 2000 section 5309 new start deltas]

State	Project location and description	Allocation	Reduction Public Law 106–113	Revised allocation
AK/HI	Alaska or Hawaii Ferry Projects	$10,322,000	$118,781	$10,203,219
AK	Girdwood, Alaska Commuter Rail Project	9,925,000	114,213	9,810,787
AL	Birmingham-Transit Corridor	2,977,500	34,264	2,943,236
AZ	Phoenix-Metropolitan Area Transit Project	4,962,500	57,106	4,905,394
CA	Sacramento-South Corridor LRT Project	24,812,500	285,532	24,526,968
CA	San Francisco-BART Extension to the Airport Project	64,512,500	742,384	63,770,116

FEDERAL TRANSIT ADMINISTRATION—Continued

[Fiscal year 2000 section 5309 new start deltas]

State	Project location and description	Allocation	Reduction Public Law 106–113	Revised allocation
CA	San Jose-Tasman West Light Rail Project	19,850,000	228,426	19,621,574
CA	San Diego-Mission Valley East Light Rail Transit Project	19,850,000	228,426	19,621,574
CA	San Diego-Mid-Coast Corridor Project	4,962,500	57,106	4,905,394
CA	San Diego-Oceanside-Escondido Light Rail System	1,985,000	22,843	1,962,157
CA	Los Angeles-North Hollywood Extension Project	49,625,000	571,064	49,053,936
CA	Los Angeles-Mid-City and East Side Corridors Projects	3,970,000	45,685	3,924,315
CA	Los Angeles-San Diego LOSSAN Corridor Project	992,500	11,421	981,079
CA	Orange County-Transitway Project	992,500	11,421	981,079
CA	Stockton-Altamont Commuter Rail Project	992,500	11,421	981,079
CA	San Bernardino-Metrolink Extension Project	992,500	11,421	981,079
CO	Denver-Southwest Corridor Project	34,737,500	399,745	34,337,755
CO	Denver-Southeast Corridor Project	2,977,500	34,264	2,943,236
CO	Roaring Fork Valley Project	992,500	11,421	981,079
CT	Stamford-Fixed Guideway Connector	992,500	11,421	981,079
DE	Wilmington-Downtown Transit Connector	992,500	11,421	981,079
FL	Fort Lauderdale-Tri-County Commuter Rail Project	9,925,000	114,213	9,810,787
FL	Palm Beach, Broward and Miami-Dade Counties Rail Corridor	496,250	5,711	490,539
FL	Miami Metro-Dade Transit East-West Corridor Project	1,488,750	17,132	1,471,618
FL	Tampa Bay-Regional Rail Project	992,500	11,421	981,079
FL	Pinellas County-Mobility Initiative Project	2,481,250	28,553	2,452,697
FL	Orlando-Lynx Light Rail Project [Phase 1]	4,962,500	57,106	4,905,394
GA	Atlanta-South DeKalb-Lindbergh Corridor Project	992,500	11,421	981,079
GA	Atlanta-North Line Extension Project	44,803,440	515,580	44,287,860
IL	Chicago-Metra Commuter Rail Project	24,812,500	285,532	24,526,968
IL	Chicago-CTA Douglas Branch Line Project	3,473,750	39,975	3,433,775
IL	Chicago-CTA Ravenswood Branch Line Project	3,473,750	39,975	3,433,775
IN	Indianapolis-Northeast Downtown Corridor Project	992,500	11,421	981,079
IN	Northern Indiana-South Shore Commuter Rail Project	3,970,000	45,685	3,924,315
KS/MO	Kansas City Area-Johnson County, KS, I–35 Commuter Rail Project	992,500	11,421	981,079
LA	New Orleans-Canal Street Corridor Project	992,500	11,421	981,079
ME	Calais-Branch Rail Line Regional Transit Program	496,250	5,711	490,539
MA	Boston-South Boston Piers Transitway	53,490,785	615,550	52,875,235
MA	Boston-Urban Ring Project	992,500	11,421	981,079
MA	Boston-North Shore Corridor Project	992,500	11,421	981,079
MA/NH	Lowell, MA-Nashua, NH Commuter Rail Project	992,500	11,421	981,079
MD	MARC Commuter Rail Project	697,730	8,029	689,701
MD	MARC-Expansion Projects-Silver Spring Intermodal and Penn-Camden Rail Connection	1,488,750	17,132	1,471,618
MD	Baltimore-Central LRT Double Track Project	4,714,380	54,251	4,660,129
MD	Wash.DC/MD-Washington Metro-Blue Line Extension-Addision Road (Largo) Project	4,714,380	54,251	4,660,129
MN	Twin Cities-Transitways Projects	2,977,500	34,264	2,943,236
MN	Twin Cities-Transitways-Hiawatha Corridor Project	42,479,000	488,831	41,990,169
MO/IL	St. Louis-St. Clair MetroLink Light Rail (Phase II) Extension Project	49,625,000	571,064	49,053,936
MO	St. Louis-MetroLink Cross County Corridor Project	2,481,250	28,553	2,452,697
NC	Charlotte-North-South Corridor Transitway Project	3,970,000	45,685	3,924,315
NC	Raleigh-Durham-Chapel Hill-Triangle Transit Project	7,940,000	91,370	7,848,630
NJ	Newark Rail Link MOS–1 Project	11,910,000	137,055	11,772,945
NJ	New Jersey Hudson-Bergen LRT Project	98,257,500	1,130,714	97,126,786
NJ/NY	Trans-Hudson Midtown Corridor	4,962,500	57,106	4,905,394
NJ	West Trenton Rail Project	992,500	11,421	981,079
NM	Greater Albuquerque Mass Transit Project	6,947,500	79,949	6,867,551
NM	Santa Fe/El Dorado Rail Link	2,977,500	34,264	2,943,236
NV	Las Vegas-Clark County, Nevada Fixed Guideway Project [1]	3,473,750	39,975	3,433,775

FEDERAL TRANSIT ADMINISTRATION—Continued

[Fiscal year 2000 section 5309 new start deltas]

State	Project location and description	Allocation	Reduction Public Law 106–113	Revised allocation
NY	New York-Whitehall Ferry Terminal Reconstruction Project	1,985,000	22,843	1,962,157
NY	New York-LIRR East Side Access Project	1,985,000	22,843	1,962,157
OH	Dayton-Light Rail Study	992,500	11,421	981,079
OH	Cincinnati-Northeast/Northern Kentucky Corridor Project	992,500	11,421	981,079
OH	Cleveland-Euclid Corridor Improvement Project	992,500	11,421	981,079
OH	Canton-Akron-Cleveland Commuter Rail Project	2,481,250	28,553	2,452,697
OR	Portland-Westside-Hillsboro Project	10,979,040	126,342	10,852,698
OR	Portland-Wilsonville to Washington County, OR Connection to Westside	496,250	5,711	490,539
PA	Harrisburg-Capitol Area Transit/Corridor One Commuter Rail Project	496,250	5,711	490,539
PA	Pittsburgh-Stage II Light Rail Project	7,940,000	91,370	7,848,630
PA	Pittsburgh-North Shore Central Business District Corridor Project	9,925,000	114,213	9,810,787
PA	Philadelphia-SEPTA Cross County Metro	992,500	11,421	981,079
PA	Philadelphia-Reading-SEPTA Schuylkill Valley Metro Project	3,970,000	45,685	3,924,315
PR	San Juan-Tren Urbano Project	31,760,000	365,481	31,394,519
SC	Charleston-Monobeam Corridor Project	2,481,250	28,553	2,452,697
TN	Memphis-Medical Center Rail Extension Project	2,481,250	28,553	2,452,697
TN	Knoxville-Memphis Commuter Rail Feasibility Study	496,250	5,711	490,539
TN	Nashville-Commuter Rail Project	992,500	11,421	981,079
TX	Austin-Capital Metro Northwest/north Central Corridor Project	992,500	11,421	981,079
TX	Dallas-North Central Light Rail Extension Project	49,625,000	571,064	49,053,936
TX	Galveston-Rail Trolley Extension Project	1,488,750	17,132	1,471,618
TX	Houston-Regional Bus Project	52,374,205	602,701	51,771,504
TX	Houston-Advanced Transit Program	2,977,500	34,264	2,943,236
UT	Salt Lake City-North/South Light Rail Project	37,643,540	433,187	37,210,353
UT	Salt Lake City-Olympic Transportation Infrastructure Investments	9,925,000	114,213	9,810,787
VA	Norfolk-Virginia Beach Corridor Project	992,500	11,421	981,079
VA	Dulles Corridor Project	24,812,500	285,532	24,526,968
VA	Virginia Railway Express Commuter Rail Project	2,183,500	25,127	2,158,373
WA	Seattle-Puget Sound RTA Link Light Rail Project	24,812,500	285,532	24,526,968
WA	Seattle-Puget Sound RTA Sounder Commuter Rail Project	4,962,500	57,106	4,905,394
WA	Spokane-South Valley Corridor Light Rail Project	1,985,000	22,843	1,962,157
WI	Kenosha-Racine-Milwaukee Rail Extension Project	992,500	11,421	981,079
	Total	$973,047,000	$11,197,429	$961,849,571

[1] An additional $1,488,750 in lapsed FY 1995 New Starts funds is made available to the Clark County, Nevada Fixed Guideway Project IAW Public Law 106–69.

FEDERAL TRANSIT ADMINISTRATION

[Fiscal year 2000 section 5309 bus allocations]

State	Project location and description	Allocation	Reduction Public Law 106–113	Revised allocation
AK	Anchorage Ship Creek intermodal facility	$4,466,325	$51,397	$4,414,928
AK	Fairbanks intermodal rail/bus transfer facility	1,985,033	22,843	1,962,190
AK	Juneau downtown mass transit facility	1,488,775	17,132	1,471,643
AK	North Star Borough-Fairbanks intermodal facility	2,977,550	34,264	2,943,286
AK	Wasilla intermodal facility	992,517	11,421	981,096
AK	Whittier intermodal facility and pedestrian overpass	1,146,357	13,192	1,133,165
AL	Alabama statewide rural bus needs	2,481,292	28,554	2,452,738
AL	Baldwin Rural Area Transportation System buses	992,517	11,421	981,096
AL	Birmingham intermodal facility	1,985,033	22,843	1,962,190
AL	Birmingham-Jefferson County buses	1,240,646	14,277	1,226,369

FEDERAL TRANSIT ADMINISTRATION—Continued

[Fiscal year 2000 section 5309 bus allocations]

State	Project location and description	Allocation	Reduction Public Law 106–113	Revised allocation
AL	Cullman, buses	496,258	5,711	490,547
AL	Dothan Wiregrass Transit Authority vehicles and transit facility	992,517	11,421	981,096
AL	Escambia County buses and bus facility	99,252	1,142	98,110
AL	Gees Bend Ferry facilities, Wilcox County	99,252	1,142	98,110
AL	Huntsville Airport international intermodal center	3,473,808	39,975	3,433,833
AL	Huntsville, intermodal facility	1,240,646	14,277	1,226,369
AL	Huntsville Space and Rocket Center intermodal center	3,473,808	39,975	3,433,833
AL	Jasper buses	49,626	571	49,055
AL	Jefferson State Community College/University of Montevallo pedestrian walkway	198,503	2,284	196,219
AL	Marshall County, buses	496,258	5,711	490,547
AL	Mobile waterfront terminal complex	4,962,583	57,107	4,905,476
AL	Montgomery Union Station intermodal center and buses	3,473,808	39,975	3,433,833
AL	Valley bus and bus facilities	109,177	1,256	107,921
AR	Arkansas Highway and Transit Department buses	1,985,033	22,843	1,962,190
AR	Arkansas state safety and preventative maintenance facility	794,013	9,137	784,876
AR	Fayetteville, University of Arkansas Transit System buses	496,258	5,711	490,547
AR	Hot Springs, national park intermodal parking facility	992,517	11,421	981,096
AR	Hot Springs, transportation depot and plaza	555,809	6,396	549,413
AR	Little Rock, Central Arkansas Transit buses	297,755	3,426	294,329
AZ	Phoenix bus and bus facilities	3,721,937	42,831	3,679,106
AZ	Phoenix South Central Avenue transit facility	496,258	5,711	490,547
AZ	San Luis, bus	69,476	800	68,676
AZ	Tucson buses	2,535,880	29,182	2,506,698
AZ	Yuma paratransit buses	124,065	1,428	122,637
CA	Bell, buses and bus facilities	198,503	2,284	196,219
CA	California Mountain Area Regional Transit Authority fueling stations	79,401	914	78,487
CA	Commerce, buses and bus facilities	357,306	4,112	353,194
CA	Contra Costa County Connection buses	248,129	2,855	245,274
CA	Cudahy, buses and bus facilities	119,102	1,371	117,731
CA	Culver City, CityBus buses	1,240,646	14,277	1,226,369
CA	Davis, Unitrans transit maintenance facility	620,323	7,138	613,185
CA	Healdsburg, intermodal facility	992,517	11,421	981,096
CA	I–5 Corridor intermodal transit centers	1,240,646	14,277	1,226,369
CA	Livermore automatic vehicle locator program	992,517	11,421	981,096
CA	Lodi, multimodal facility	843,639	9,708	833,931
CA	Los Angeles County Metropolitan transportation authority buses	2,977,550	34,264	2,943,286
CA	Los Angeles County Foothill Transit buses and HEV vehicles	1,736,904	19,988	1,716,916
CA	Los Angeles Municipal Transit Operators Coalition	2,233,162	25,698	2,207,464
CA	Los Angeles, Union Station Gateway Intermodal Transit Center	1,240,646	14,277	1,226,369
CA	Maywood, buses and bus facilities	119,102	1,371	117,731
CA	Modesto, bus maintenance facility	620,323	7,138	613,185
CA	Monterey, Monterey-Salinas buses	620,323	7,138	613,185
CA	Orange County, bus and bus facilities	1,985,033	22,843	1,962,190
CA	Perris bus maintenance facility	1,240,646	14,277	1,226,369
CA	Redlands, trolley project	794,013	9,137	784,876
CA	Sacramento CNG buses	1,240,646	14,277	1,226,369
CA	San Bernardino Valley, CNG buses	992,517	11,421	981,096
CA	San Bernardino train station	2,977,550	34,264	2,943,286
CA	San Diego North County buses and CNG fueling station	2,977,550	34,264	2,943,286
CA	San Francisco, Islais Creek maintenance facility	1,240,646	14,277	1,226,369
CA	Santa Barbara buses and bus facility	1,736,904	19,988	1,716,916
CA	Santa Clarita bus maintenance facility	1,240,646	14,277	1,226,369
CA	Santa Cruz buses and bus facilities	1,741,867	20,045	1,721,822
CA	Santa Maria Valley/Santa Barbara County, buses	238,204	2,741	235,463
CA	Santa Rosa/Cotati, Intermodal Transportation Facilities	744,387	8,566	735,821
CA	Westminster senior citizen vans	148,877	1,713	147,164
CA	Windsor, Intermodal Facility	744,387	8,566	735,821
CA	Woodland Hills, Warner Center Transportation Hub	620,323	7,138	613,185
CO	Boulder/Denver, RTD buses	620,323	7,138	613,185

FEDERAL TRANSIT ADMINISTRATION—Continued

[Fiscal year 2000 section 5309 bus allocations]

State	Project location and description	Allocation	Reduction Public Law 106–113	Revised allocation
CO	Colorado buses and bus facilities	7,940,133	91,372	7,848,761
CO	Denver, Stapleton Intermodal Center	1,240,646	14,277	1,226,369
CT	New Haven bus facility	2,233,162	25,698	2,207,464
CT	Norwich buses	2,233,162	25,698	2,207,464
CT	Waterbury, bus facility	2,233,162	25,698	2,207,464
DC	Fuel cell bus and bus facilities program, Georgetown University	4,813,706	55,394	4,758,312
DC	Washington, D.C. Intermodal Transportation Center, District	2,481,292	28,554	2,452,738
DE	Delaware buses and bus facility	496,258	5,711	490,547
DE	New Castle County buses and bus facilities	1,985,033	22,843	1,962,190
FL	Daytona Beach, Intermodal Center	2,481,292	28,554	2,452,738
FL	Gainesville hybrid-electric buses and facilities	496,258	5,711	490,547
FL	Jacksonville buses and bus facilities	992,517	11,421	981,096
FL	Lakeland, Citrus Connection transit vehicles and related equipment	1,240,646	14,277	1,226,369
FL	Miami Beach, electric shuttle service	744,387	8,566	735,821
FL	Miami-Dade Transit buses	2,729,421	31,409	2,698,012
FL	Orlando, Lynx buses and bus facilities	1,985,033	22,843	1,962,190
FL	Orlando, Downtown Intermodal Facility	2,481,292	28,554	2,452,738
FL	Palm Beach, buses	992,517	11,421	981,096
FL	Tampa HARTline buses	496,258	5,711	490,547
GA	Atlanta, MARTA buses	13,398,973	154,190	13,244,783
GA	Chatham Area Transit Bus Transfer Center and buses	3,473,808	39,975	3,433,833
GA	Georgia Regional Transportation Authority buses	1,985,033	22,843	1,962,190
GA	Georgia statewide buses and bus-related facilities	2,729,421	31,409	2,698,012
HI	Hawaii buses and bus facilities	2,233,162	25,698	2,207,464
HI	Honolulu, bus facility and buses	1,985,033	22,843	1,962,190
IA	Ames transit facility expansion	694,762	7,995	686,767
IA	Cedar Rapids intermodal facility	3,315,007	38,150	3,276,857
IA	Clinton transit facility expansion	496,258	5,711	490,547
IA	Fort Dodge, Intermodal Facility (Phase II)	878,377	10,108	868,269
IA	Iowa City intermodal facility	1,488,775	17,132	1,471,643
IA	Iowa statewide buses and bus facilities	2,481,292	28,554	2,452,738
IA	Iowa/Illinois Transit Consortium bus safety and security	992,517	11,421	981,096
IA	Mason City, bus facility	158,801	1,825	156,976
IL	East Moline transit center	645,136	7,424	637,712
IL	Illinois statewide buses and bus-related equipment	8,138,636	93,656	8,044,980
IN	Gary, Transit Consortium buses	1,240,646	14,277	1,226,369
IN	Indianapolis buses	4,962,583	57,107	4,905,476
IN	South Bend Urban Intermodal Transportation Facility	1,240,646	14,277	1,226,369
IN	West Lafayette bus transfer station/terminal (Wabash Land ing)	1,736,904	19,988	1,716,916
KS	Girard, buses and vans	694,762	7,995	686,767
KS	Girard Southeast Kansas Community Action Agency maintenance facility	476,408	5,482	470,926
KS	Johnson County, farebox equipment	248,129	2,855	245,274
KS	Kansas City buses	744,387	8,566	735,821
KS	Kansas buses and bus facilities	1,488,775	17,132	1,471,643
KS	Topeka Transit downtown transfer facility	595,510	6,853	588,657
KS	Wichita, buses and bus facilities	2,481,292	28,554	2,452,738
KY	Kentucky (southern and eastern) transit vehicles	992,517	11,421	981,096
KY	Lexington (LexTran), maintenance facility	992,517	11,421	981,096
KY	River City, buses	1,488,775	17,132	1,471,643
KY	Transit Authority of Northern Kentucky (TANK) buses	2,481,292	28,554	2,452,738
LA	Baton Rouge, buses and bus-related facilities	297,755	3,426	294,329
LA	Jefferson Parish, buses and bus-related facilities	44,663	514	44,149
LA	Lafayette, buses and bus-related facilities	148,877	1,713	147,164
LA	Louisiana DOTD, buses and and bus-related, including the purchase of vans	521,071	5,996	515,075
LA	Monroe, buses and bus-related facilities	287,830	3,312	284,518
LA	New Orleans, buses and bus-related facilities	3,275,305	37,691	3,237,614
LA	Shreveport, buses and bus-related facilities	327,530	3,769	323,761

FEDERAL TRANSIT ADMINISTRATION—Continued

[Fiscal year 2000 section 5309 bus allocations]

State	Project location and description	Allocation	Reduction Public Law 106–113	Revised allocation
LA	St Tammany Parish, buses and bus-related facilities	59,551	685	58,866
MA	Attleboro intermodal transit facility	496,258	5,711	490,547
MA	Brockton intermodal transportation center	1,091,768	12,564	1,079,204
MA	Greenfield Montague, buses	496,258	5,711	490,547
MA	Merrimack Valley Regional Transit Authority bus facilities	464,002	5,340	458,662
MA	Montachusett, bus and park-and-ride facilities	1,240,646	14,277	1,226,369
MA	Pioneer Valley, alternative fuel and paratransit vehicles	645,136	7,424	637,712
MA	Pittsfield intermodal center	3,573,060	41,117	3,531,943
MA	Springfield, Union Station	1,240,646	14,277	1,226,369
MA	Swampscott, buses	64,514	742	63,772
MA	Westfield, intermodal transportation facility	496,258	5,711	490,547
MA	Worcester, Union Station Intermodal Transportation Center	2,481,292	28,554	2,452,738
MD	Maryland statewide bus facilities and buses	11,413,940	131,347	11,282,593
MI	Detroit, transfer terminal facilities	3,933,343	45,263	3,888,080
MI	Detroit, EZ Ride program	284,852	3,278	281,574
MI	Menominee-Delta-Schoolcraft buses	248,129	2,855	245,274
MI	Michigan statewide buses	22,331,623	256,998	22,074,625
MI	Port Huron, CNG fueling station	496,258	5,711	490,547
MN	Duluth, Transit Authority community circulation vehicles	992,517	11,421	981,096
MN	Duluth, Transit Authority intelligent transportation systems	496,258	5,711	490,547
MN	Duluth, Transit Authority Transit Hub	496,258	5,711	490,547
MN	Greater Minnesota transit authorities	496,258	5,711	490,547
MN	Northstar Corridor, Intermodal Facilities and buses	9,925,165	114,215	9,810,950
MN	Twin Cities metroplitan buses and bus facilities	9,925,165	114,215	9,810,950
MO	Columbia buses and vans	496,258	5,711	490,547
MO	Franklin County buses and bus facilities	198,503	2,284	196,219
MO	Jackson County buses and bus facilities	496,258	5,711	490,547
MO	Kansas City Area Transit Authority buses and Troost transit center	2,481,292	28,554	2,452,738
MO	Missouri statewide bus and bus facilities	3,473,808	39,975	3,433,833
MO	OATS Transit	1,488,775	17,132	1,471,643
MO	Southeast Missouri transportation service rural, elderly, disabled service	1,240,646	14,277	1,226,369
MO	Southwest Missouri State University park and ride facility	992,517	11,421	981,096
MO	St. Joseph buses and vans	496,258	5,711	490,547
MO	St. Louis, Bi-state Intermodal Center	1,240,646	14,277	1,226,369
MO	St. Louis, buses	1,985,033	22,843	1,962,190
MS	Harrison County multimodal center	2,977,550	34,264	2,943,286
MS	Jackson, maintenance and administration facility project	992,517	11,421	981,096
MS	North Delta planning and development district, buses and bus facilities	1,191,020	13,706	1,177,314
MT	Missoula urban transportation district buses	595,510	6,853	588,657
NC	Greensboro multimodal center	3,314,013	38,136	3,275,877
NC	Greensboro, Transit Authority buses	1,488,775	17,132	1,471,643
NC	North Carolina statewide buses and bus facilities	2,473,351	28,462	2,444,889
ND	North Dakota statewide buses and bus-related facilities	992,517	11,421	981,096
NH	New Hampshire statewide transit systems	2,977,550	34,264	2,943,286
NJ	New Jersey Transit alternative fuel buses	4,962,583	57,107	4,905,476
NJ	New Jersey Transit jitney shuttle buses	1,736,904	19,988	1,716,916
NJ	Newark intermodal and arena access improvements	1,637,652	18,845	1,618,807
NJ	Newark, Morris & Essex Station access and buses	1,240,646	14,277	1,226,369
NJ	South Amboy, Regional Intermodal Transportation Initiative	1,240,646	14,277	1,226,369
NM	Albuquerque West Side transit facility	1,985,033	22,843	1,962,190
NM	Albuquerque, buses	1,240,646	14,277	1,226,369
NM	Las Cruces buses and bus facilities	744,387	8,566	735,821
NM	Northern New Mexico Transit Express/Park and Ride buses	2,729,421	31,409	2,698,012
NM	Santa Fe, buses and bus facilities	1,985,033	22,843	1,962,190
NV	Clark County Regional Transportation Commission buses and bus facilities	2,481,292	28,554	2,452,738
NV	Lake Tahoe CNG buses	694,762	7,995	686,767
NV	Washoe County transit improvements	2,233,162	25,698	2,207,464
NY	Babylon Intermodal Center	1,240,646	14,277	1,226,369

FEDERAL TRANSIT ADMINISTRATION—Continued

[Fiscal year 2000 section 5309 bus allocations]

State	Project location and description	Allocation	Reduction Public Law 106–113	Revised allocation
NY	Buffalo, Auditorium Intermodal Center	1,985,033	22,843	1,962,190
NY	Dutchess County, Loop System buses	517,101	5,951	511,150
NY	Ithaca intermodal transportation center	1,116,581	12,849	1,103,732
NY	Ithaca, TCAT bus technology improvements	1,240,646	14,277	1,226,369
NY	Long Island, CNG transit vehicles and facilities and bus replacement	1,240,646	14,277	1,226,369
NY	Mineola/Hicksville, LIRR intermodal centers	1,240,646	14,277	1,226,369
NY	New York City Midtown West 38th Street ferry terminal	992,517	11,421	981,096
NY	New York, West 72nd St. Intermodal Station	1,736,904	19,988	1,716,916
NY	Putnam County, vans	466,483	5,368	461,115
NY	Rensselaer intermodal bus facility	5,955,100	68,529	5,886,571
NY	Rochester buses and bus facility	992,517	11,421	981,096
NY	Syracuse, buses	2,977,550	34,264	2,943,286
NY	Utica Union Station	2,084,285	23,985	2,060,300
NY	Westchester County DOT, articulated buses	1,240,646	14,277	1,226,369
NY	Westchester County, Bee-Line transit system fareboxes	971,674	11,182	960,492
NY	Westchester County, Bee-Line transit system shuttle buses	992,517	11,421	981,096
OH	Cleveland, Triskett Garage bus maintenance facility	620,323	7,138	613,185
OH	Dayton, Multimodal Transportation Center	4,094,131	47,114	4,047,017
OH	Ohio statewide buses and bus facilities	8,942,823	102,910	8,839,913
OK	Oklahoma statewide bus facilities and buses	4,962,583	57,107	4,905,476
OR	Corvallis buses and automated passenger information system	297,755	3,426	294,329
OR	Lane County, Bus Rapid Transit, buses and facilities	4,367,073	50,254	4,316,819
OR	Lincoln County Transit District buses	248,129	2,855	245,274
OR	Portland, Tri-Met bus maintenance facility	645,136	7,424	637,712
OR	Portland, Tri-Met buses	1,736,904	19,988	1,716,916
OR	Salem Area Mass Transit District natural gas buses	496,258	5,711	490,547
OR	Sandy buses	99,252	1,142	98,110
OR	South Metro Area Rapid Transit (SMART) maintenance facility	198,503	2,284	196,219
OR	Sunset Empire Transit District intermodal transit facility	297,755	3,426	294,329
PA	Allegheny County buses	1,488,775	17,132	1,471,643
PA	Altoona bus testing	2,977,550	34,264	2,943,286
PA	Altoona, Metro Transit Authority buses and transit system improvements	835,699	9,617	826,082
PA	Armstrong County-Mid-County, bus facilities and buses	148,877	1,713	147,164
PA	Bethlehem, intermodal facility	992,517	11,421	981,096
PA	Cambria County, bus facilities and buses	570,697	6,567	564,130
PA	Centre Area Transportation Authority buses	1,240,646	14,277	1,226,369
PA	Chester County, Paoli Transportation Center	992,517	11,421	981,096
PA	Erie, Metropolitan Transit Authority buses	992,517	11,421	981,096
PA	Fayette County, intermodal facilities and buses	1,260,496	14,505	1,245,991
PA	Lackawanna County Transit System buses	595,510	6,853	588,657
PA	Lackawanna County, intermodal bus facility	992,517	11,421	981,096
PA	Mid-Mon Valley buses and bus facilities	248,129	2,855	245,274
PA	Norristown, parking garage (SEPTA)	992,517	11,421	981,096
PA	Philadelphia, Frankford Transportation Center	4,962,583	57,107	4,905,476
PA	Philadelphia, Intermodal 30th Street Station	1,240,646	14,277	1,226,369
PA	Reading, BARTA Intermodal Transportation Facility	1,736,904	19,988	1,716,916
PA	Robinson, Towne Center Intermodal Facility	1,488,775	17,132	1,471,643
PA	Somerset County bus facilities and buses	173,690	1,999	171,691
PA	Towamencin Township, Intermodal Bus Transportation Center	1,488,775	17,132	1,471,643
PA	Washington County intermodal facilities	625,285	7,196	618,089
PA	Westmoreland County, Intermodal Facility	198,503	2,284	196,219
PA	Wilkes-Barre, Intermodal Facility	1,240,646	14,277	1,226,369
PA	Williamsport bus facility	1,191,020	13,706	1,177,314
PR	San Juan Intermodal access	595,510	6,853	588,657
RI	Providence, buses and bus maintenance facility	3,269,350	37,622	3,231,728
SC	Central Midlands COG/Columbia transit system	2,679,795	30,838	2,648,957
SC	Charleston Area regional transportation authority	1,885,782	21,701	1,864,081
SC	Clemson Area Transit buses and bus equipment	545,884	6,282	539,602
SC	Greenville transit authority	496,258	5,711	490,547
SC	Pee Dee buses and facilities	893,265	10,279	882,986

FEDERAL TRANSIT ADMINISTRATION—Continued

[Fiscal year 2000 section 5309 bus allocations]

State	Project location and description	Allocation	Reduction Public Law 106–113	Revised allocation
SC	Santee-Wateree regional transportation authority	397,007	4,569	392,438
SC	South Carolina Statewide Virtual Transit Enterprise	1,210,870	13,934	1,196,936
SC	Transit Management of Spartanburg, Incorporated (SPARTA)	595,510	6,853	588,657
SD	South Dakota statewide bus facilities and buses	1,488,775	17,132	1,471,643
TN	Southern Coalition for Advanced Transportation (SCAT) (TN, GA, FL, AL) electric buses	3,473,808	39,975	3,433,833
TX	Austin buses	1,736,904	19,988	1,716,916
TX	Beaumont Municipal Transit System buses and bus facilities	992,517	11,421	981,096
TX	Brazos Transit Authority buses and bus facilities	992,517	11,421	981,096
TX	El Paso Sun Metro buses	992,517	11,421	981,096
TX	Fort Worth bus replacement (including CNG vehicles) and paratransit vehicles	2,481,292	28,554	2,452,738
TX	Fort Worth intermodal transportation center	3,076,802	35,407	3,041,395
TX	Galveston buses and bus facilities	992,517	11,421	981,096
TX	Texas statewide small urban and rural buses	4,962,583	57,107	4,905,476
UT	Ogden Intermodal Center	794,013	9,137	784,876
UT	Salt Lake City Olympics bus facilities	2,481,292	28,554	2,452,738
UT	Salt Lake City Olympics regional park and ride lots	2,481,292	28,554	2,452,738
UT	Salt Lake City Olympics transit bus loan project	496,258	5,711	490,547
UT	Utah Transit Authority, intermodal facilities	1,488,775	17,132	1,471,643
UT	Utah Transit Authority/Park City Transit, buses	6,451,358	74,240	6,377,118
VA	Alexandria, bus maintenance facility	992,517	11,421	981,096
VA	Alexandria, Transit Center	992,517	11,421	981,096
VA	Dulles Corridor Park-and-Ride Express Bus Program	1,985,033	22,843	1,962,190
VA	Fair Lakes League	198,503	2,284	196,219
VA	Loudoun Transit multi-modal facility	992,517	11,421	981,096
VA	Potomac and Rappahannock Transportation Commission fleet replacement	1,786,530	20,559	1,765,971
VA	Prince William County Agency on the Aging bus replacement	84,364	971	83,393
VA	Richmond, GRTC bus maintenance facility	1,240,646	14,277	1,226,369
VA	Richmond Main Street Station	2,332,414	26,840	2,305,574
VT	Burlington multimodal center	2,679,795	30,838	2,648,957
VT	Chittenden County Transportation Authority buses	794,013	9,137	784,876
VT	Essex Junction multimodal station rehabilitation	496,258	5,711	490,547
VT	Killington-Sherburne satellite bus facility	248,129	2,855	245,274
WA	Bremerton multimodal center-Sinclair's Landing	744,387	8,566	735,821
WA	Everett, Multimodal Transportation Center	1,935,407	22,272	1,913,135
WA	Grant County, Grant Transit Authority	496,258	5,711	490,547
WA	Grays Harbor County, buses and equipment	1,240,646	14,277	1,226,369
WA	King Country Metro King Street Station	1,985,033	22,843	1,962,190
WA	King County Metro Atlantic and Central buses	1,488,775	17,132	1,471,643
WA	King County park and ride expansion	1,339,897	15,419	1,324,478
WA	Mount Vernon, buses and bus related facilities	1,736,904	19,988	1,716,916
WA	Pierce County Transit buses and bus facilities	496,258	5,711	490,547
WA	Seattle, intermodal transportation terminal	1,240,646	14,277	1,226,369
WA	Sequim, Clallam Transit multimodal center	992,517	11,421	981,096
WA	Snohomish County, Community Transit buses, equipment and facilities	1,240,646	14,277	1,226,369
WA	Spokane, HEV buses	1,488,775	17,132	1,471,643
WA	Tacoma Dome Station	248,129	2,855	245,274
WA	Vancouver Clark County (C–TRAN) bus facilities	992,517	11,421	981,096
WA	Washington State DOT combined small transit system buses and bus facilities	1,985,033	22,843	1,962,190
WI	Milwaukee County, buses	5,955,100	68,529	5,886,571
WI	Wisconsin statewide bus facilities and buses	14,143,361	162,756	13,980,605
WV	Huntington intermodal facility	11,910,198	137,058	11,773,140
WV	Parkersburg, intermodal transportation facility	4,466,325	51,397	4,414,928
WV	West Virginia Statewide Intermodal Facility and buses	4,962,583	57,107	4,905,476
	Subtotal (initial allocations/projects adjusted)	537,348,250	6,183,585	531,164,665

FEDERAL TRANSIT ADMINISTRATION—Continued

[Fiscal year 2000 section 5309 bus allocations]

State	Project location and description	Allocation	Reduction Public Law 106–113	Revised allocation
	Additional Allocations Under Public Law 106–113			
AK	Anchorage, Alaska 2001 Special Olympics Winter Games buses and bus facilities	2,481,250	9,500	2,471,750
CA	Santa Clarita, California bus maintenance facility	744,375	2,850	741,525
MN	Twin Cities, Minnesota metropolitan buses and bus facilities	1,736,875	6,650	1,730,225
NE	Lincoln, Nebraska bus maintenance facility	992,500	3,800	988,700
	Subtotal	5,955,000	22,800	5,932,200
	Total ALLOCATION	543,303,250	6,206,385	537,096,865

TRANSIT PLANNING AND RESEARCH, NATIONAL PROGRAM

[Congressional Earmarks]

	Fiscal year 2000		
	Conference	Reduction Public Law 106–113	Revised
Hennepin Community Works Program, Hennepin County, MN	$1,000,000	$11,509	$988,492
Project ACTION (National Easter Seat Society)	3,000,000	34,523	2,965,477
Fuel Cell Bus Program, Palm Springs, CA	1,000,000	11,508	988,492
Advanced Transit Systems and Electric Vehicle Program (CALSTART)	3,250,000	37,400	3,212,600
Santa Barbara Transportation Institute	500,000	5,754	494,246
Zinc-Air Battery Research	1,000,000	11,508	988,492
Safety and Security (TSI and others)	5,450,000		5,450,000
Ady. Electric Transit Buses/Infrastructure (MBTA, MA)	1,500,000	17,261	1,482,739
Intermodal Tech Center (Gloucester, MA)	1,500,000	17,261	1,482,739
Transit Technology (Washoe County, NV)	1,250,000	14,384	1,235,616
Electric Vehicle Information Sharing and Technology Transfer Program	750,000	8,631	741,369
Adv. Propulsion Control System (SEPTA)	3,000,000	34,523	2,965,477
Portland, ME Independent Transportation Network	500,000	5,754	494,246
International Program	1,000,000	11,508	988,492
Pittsfield Economic Development Authority, Electric Bus Program	1,350,000	15,535	1,334,465
Citizens for Modem Transit, Missouri	300,000	3,452	296,548
Wheeling, West Virginia mobility study	250:000	2,876	247,124
Total Earmarks	26,600,000	243,396	26,356,614

Question. Did DOT follow the provisions of the Consolidated Appropriations Act that no program, project, or activity could be reduced by more than 15 percent? Did DOT follow the guidance of OMB that: reductions should be taken from the least critical funding available to the agency; reductions should be considered from funding above the President's request; no reductions should be taken that would require reductions-in-force (RIFs); and agencies should make targeted recommendations rather than across-the-board funding cuts?

Answer. The Department complied with the law that no program, project, or activity could be reduced by more than 15 percent; and the Department followed the OMB guidance on how to apply the reduction. Specifically, the Department allocated the reduction so that operating programs affecting life and safety, such as Motor Carriers, National Highway Traffic Safety, FAA operations and capital, and Coast Guard operations were not reduced. The reductions to the remaining programs were focused, to the extent possible, on Congressional earmarks that were not Adminis-

tration priorities, and accounts that were funded at higher levels than requested by the Administration. The Department's appropriations bill contained close to 600 funding earmarks. These earmarks were a logical place to absorb part of the reduction. For FAA's airport grant program, the reduction of $54.4 million was taken in this account since Congress enacted an obligation limitation substantially above the Administration's request.

BORDERS AND CORRIDORS PROGRAM

Question. In last year's Transportation Appropriations bill signed by the President, Congress earmarked several projects in the Section 1118–1119 Borders and Corridors program. One of those earmarks was a small, but much-needed $1 million project to realign the road serving the United States port-of-entry at Columbus, New Mexico. I understand that the State of New Mexico Highway and Transportation Department has chosen not to apply for these earmarked funds from the Federal Highway Administration out of fear that such an application would jeopardize the state's ability to receive funding for other projects for which it has applied in the 1118–1119 program. It certainly was not my intention in earmarking funds for such a small project to prejudice New Mexico's ability to receive funding for other critical border-related projects in the state.

Does the Department of Transportation consider whether a state has received earmarked funds for a Section 1118–1119 project when deciding whether to award funds to the same state for other discretionary projects in the Section 1118–1119 program? In other words, are states penalized or prejudiced if they receive a congressional earmark, or does the Department review each state's projects on their merits and with regard to available funds, without considering these earmarks?

Answer. The Department expects to make the final decisions for fiscal year 2000 Borders and Corridors awards in March. Because of the limited amount of funding available for this program, the Department will base its decisions only on the merit of each project.

Competition for fiscal year 2000 funds is especially fierce because the Department has received requests for far more funding than is available. The Department has received approximately 150 applications totaling over $2 billion. The fiscal year 2000 budget provides $122 million for the Borders and Corridors, but congressional earmarking has limited the amount of truly discretionary funding to about half of the total program. For fiscal year 2001, the Administration has requested to double the funding for this program.

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER S. BOND

REVENUE ALIGNED BUDGET AUTHORITY

Question. Mr. Secretary, let me bring up a budget specific item. You might refer to it as the Revenue Aligned Budget Authority or RABA—I call it Bond/Chafee. This provision included in TEA–21 is very specific. It says that increased revenue to the Highway Trust Fund would be distributed equally across all Federal-Aid highway programs and recognized that the dedicated tax would be spent for its dedicated purposes. Last year your budget proposed diverting some of these revenues to other items and Congress rejected it. This year you propose to do something similar again. I will tell you now that I will work to make certain that diversion of funds from the Bond/Chafee fund do not occur.

But I have to ask you, do you disagree with me on the tremendous highway infrastructure improvement needs that exist? I know that some of the programs your budget would divert Bond/Chafee funding to already receive Highway Trust Fund support. TEA–21 was clear in what received funding from the Highway Trust Fund that is supported by gas taxes. If these additional items are of such high priority why not propose to fund them in a straightforward manner with offsets?

Answer. The Administration has proposed that a portion of the Revenue Aligned Budget Authority be dedicated to programs such as the Commercial Drivers License program, expanded passenger rail and the Job Access program in order to improve safety, mobility, and economic development—all priorities established in TEA–21. DOT agrees with the need for highway infrastructure investment, but there is also a need to view and invest in all parts of the surface transportation system.

AVIATION SAFETY

Question. Now, let me switch topics briefly. I commend the good work of the Department of Transportation where under your leadership the Department is aggressively pursuing open skies agreements to facilitate increased global trade and U.S.

jobs. As you have often stated, the first priority in transportation is safety, and all of us here support you on this.

Last year, the International Civil Aviation Organization (ICAO) performed an audit of the FAA to determine if they met international standards. It is my understanding that the FAA did very well, and I commend you and Administrator Garvey for that. I also understand that ICAO is auditing every member country, 185 in total, against these same international standards and that some of the countries are not doing as well as the FAA.

Can you please provide for the record how the Department of Transportation provides technical regulatory assistance to other countries that do not do as well as the FAA in these ICAO audits? I am especially interested in countries where we have bilateral airspace agreements and how important the Department of Transportation's assistance is to ensuring that passengers and goods being transported to and from the United States are afforded the same level of safety regardless of the air carrier?

Answer. Since the ICAO Universal Safety Oversight Audit Program got underway last March, we have not received results from many of the 185 audits. However, when appropriate in the aftermath of these audits, ICAO makes available the services of its Technical Cooperation Bureau (TCB) to assist nations in developing and implementing plans to remedy identified deficiencies to ensure that these nations provide the level of safety oversight required by ICAO standards.

FAA supports TCB efforts and has made significant contributions in this arena. In June 1999, FAA completed development of a "model aviation document," i.e. a model aviation law, aviation regulations, and implementing standards for flight operations and continuing airworthiness of aircraft. As a follow-on to this effort, FAA and ICAO, in the context of the ICAO TRAINAIR program, will soon complete development of inspector and instructor training courses that are based on the model aviation document. The model aviation document has been made available to ICAO and any ICAO Contracting State that makes a request. The courses will be available at the FAA Academy and any other ICAO-sanctioned training center. FAA is also involved in several collective safety oversight-related assistance projects, in collaboration with ICAO, in South America and Asia.

Resources permitting, FAA also engages, on bilateral bases, in cooperative assistance work with individual civil aviation authorities. Examples include Venezuela and the People's Republic of China. While FAA is interested in raising the safety bar globally, it is particularly important that FAA efforts be focused on States that either have operators that operate to the U.S. or engage in code-share arrangements with U.S. air carriers.

Question. Last item, also related to aviation safety. I would like to inquire about Alaska Airlines Flight 261, but first I would like to offer my condolences to the families and friends of the 88 people who perished in this tragic accident. This accident involving an MD–80 series aircraft is very troubling. I've read that the MD–80 has an outstanding safety record, in fact one of the best in the industry. It has the reputation as a safe, reliable aircraft, and there are more than 1,000 of the aircraft being used by 69 airlines around the world. Alaska Airlines, which, as I understand it, has a good safety record, has pledged its support to the families and friends of those who lost their lives on Flight 261. It is my understanding that NTSB, FAA, Alaska Airlines, Boeing, pilots and many others are cooperating in the investigation, all with the same goal, namely to determine the cause of this tragic accident so that it can be prevented in the future. I was wondering if you could briefly comment on the MD–80, the Department's commitment to safety, and cooperation in accident investigations?

Answer. The DC–9/MD 80 fleet of some 2,300 aircraft worldwide does indeed have an excellent safety record. Alaska Airlines has been flying since 1932 and its record has also been excellent.

The Department is committed to providing full support to the NTSB's investigation. The investigation team has made remarkable progress in quickly finding the recorders and recovering critical pieces of the aircraft's flight control system. The cooperation among all parties involved in the investigation has been outstanding, and the Department is confident that the Safety Board will determine the probable cause.

The Department will react quickly to the safety lessons learned during the investigation and will take action to assure that this tragic event will not be repeated.

QUESTIONS SUBMITTED BY SENATOR SLADE GORTON

EUROPEAN UNION'S HUSHKIT REGULATION

Question. Last year the European Union (EU) adopted a regulation banning certain aircraft meeting the highest internationally recognized noise standards from flying into Europe after 2002. At that time, I strongly objected to the so-called hushkit regulation, arguing that it undermined the integrity of the current and future international noise standards and had a discriminatory impact on U.S. carriers and equipment manufacturers.

During the appropriations process, I spearheaded a Sense of the Senate Resolution encouraging the U.S. Government to take all reasonable means to ensure that the regulation was repealed and to file an Article 84 action within the International Civil Aviation (ICAO) if repeal was not achieved. More than six months have passed, and I understand the EU is no closer to repealing the rule. When will you be filing the Article 84 action? I am told that such an action is underway but has not yet been finalized. Can you give me a date certain by which the action will be filed?

Answer. Led by the State Department's Legal Advisor's office, counsel and experts from several agencies collaborated on the United States' submission (the "Memorial") to ICAO. The action was filed on March 14, 2000.

SOUND TRANSIT

Question. What is the current status of negotiations between the Federal Transit Administration and Sound Transit regarding a Full Funding Grant Agreement? Due to the fact that Sound Transit has been rated as one of the top projects in the country, do you see any obstacles to a Full Funding Grant Agreement being awarded this year?

Answer. Federal Transit Administration (FTA) is working to accommodate Sound Transit's aggressive time frame established for the Link Light Rail design-build effort. In January 2000, Sound Transit submitted a request for FTA approval of entry of Minimum Operable Segment (MOS–1) into Final Design. Approval of Final Design was granted on February 15, 2000. FTA and Sound Transit have begun discussions regarding a Full Funding Grant Agreement (FFGA) for MOS–1. The fiscal year 2001 budget recommends Sound Transit for an FFGA at the $35 million level.

The Fiscal Year 2000 Department of Transportation and Related Agencies Appropriations Act Conference Report directs FTA to enter into FFGAs only when there are no outstanding issues which would have a material effect on the estimated cost of the project or on the local financial commitment to complete the project under the terms of the agreement. To this end, FTA is currently reviewing the technical and financial capacity and project cost estimate, and other issues, which could potentially affect the timing of an FFGA.

FAA CONTRACT TOWERS

Question. It has come to my attention that the FAA has threatened to cut funding to the Contract Tower Program on April 1. As you know, I have been a consistent supporter of this program. Cuts would adversely affect airports from Olympia to Walla Walla in Washington State. What is the current status of this proposal, and what is the justification?

Answer. The FAA is facing a shortfall in its operating budget this year. That is why the Administration has proposed fiscal year 2000 supplementals with the fiscal year 2001 budget; the supplementals would allow the shifting of some costs currently being borne by the Operations appropriation. No decisions have been made yet on the canceling of contract tower services. Obviously, DOT does not want to reduce funding for this program and hopes that Congress will provide the supplemental funding to ensure continued operations. The contract tower program is assumed to be fully funded in the FAA budget request for fiscal year 2001.

QUESTIONS SUBMITTED BY SENATOR BEN NIGHTHORSE CAMPBELL

IMPROVEMENTS FOR SMALL COLORADO AIRPORTS

Question. Mr. Secretary, in different parts of Colorado, there are airports which have peaks and valleys as far as passenger enplanements go. I am concerned because they are usually smaller airports, compared to Denver and Colorado Springs, and they may be in need of some modernization. Can you tell me what sort of sched-

ule some of the smaller airports in Colorado are on for receiving more modern facilities, and whether the budget you are proposing will trickle down to these airports?

Answer. All of the airports in Colorado that have commercial service are included in the FAA's National Plan of Integrated Airport Systems (NPIAS). This makes them eligible for funding from the Airport Improvement Program (AIP). The FAA works with each airport in the NPIAS to develop an airport capital improvement plan that describes the projects that should compete for AIP funds in a three- to five-year time frame. Therefore, FAA is aware of the needs and priorities at these airports.

If the airports have 10,000 or more annual enplanements, they receive AIP entitlement funds. Otherwise, the airports compete for discretionary funds with other airports of the same size. The AIP has a "small airport" set aside. Funding will depend on availability of funds and priorities. The fiscal year 2001 budget, along with the increased cap on passenger facility charges, will create a record level of federally approved funds for airport development.

COLORADO CIVIL AIR PATROL

Question. I would like to take a second to recognize the Colorado Civil Air Patrol. They do a wonderful job locating lost aircraft and rescuing some people in very challenging situations. I know that they are more of a Department of Defense budget item, but do you think more funding should be made available to them, and the other Civil Air Patrol offices?

Answer. The Civil Air Patrol provides a valuable service. You are correct that it is the Defense Department, and not the Department of Transportation, that provides funding for civil air patrols and can more appropriately address the issue of funding.

NUCLEAR WASTE TRANSPORTATION

Question. We have been debating the Nuclear Waste bill on the Senate floor all week long. I have frequently stated that I am concerned about the ability of our mountain railroads and highways to safely handle the transportation of this high-level nuclear waste to the proposed Yucca Mountain site. What are your thoughts on the proposed transportation of high-level nuclear waste, and what steps does the Department plan to take, should this bill become law, to ensure the safety of those sharing the roads with these shipments?

Answer. The Department is doing everything it can to ensure the continued safe transportation of radioactive materials, including high-level nuclear waste. It should be noted that the Department of Energy is the Federal agency with the lead responsibility in this area.

RAIL TRANSPORTATION OF NUCLEAR WASTE

Question. Under the current bill pending on the Senate floor, the Department of Transportation is in charge of the route in which nuclear waste is taken to Yucca Mountain. What precautions are going to be taken to ensure that railway transportation of nuclear waste is going to be safe, since currently there are no restrictions on railway transportation? What types of precautions will be taken on steep grades, bridges, tunnels, etc.? If an accident does occur on a railway passage, do you think there is sufficient infrastructure to cope with the emergency situation?

Answer. The Department of Energy (DOE) is the Federal agency with the lead responsibility in this area, including both the safe transportation and storage of nuclear waste. Since the Federal Railroad Administration (FRA) has regulatory oversight for the safety of railroad operations within the United States, FRA contributes to the safe transportation of Spent Nuclear Fuel (SNF)[1] and High-Level Radioactive Waste (HLRW)[2]. These materials have been transported safely by rail in the United States for more than 40 years. In the mid-1980s, partly as a result of the rail shipments from the Three Mile Island Nuclear Power Plant, FRA implemented its High-

[1] The Nuclear Waste Policy Act of 1982 (NWPA) defines "spent nuclear fuel" as "fuel that has been withdrawn from a nuclear reactor following irradiation, the constituent elements of which have not been separated by reprocessing."

[2] NWPA defines "high-level radioactive waste" as "(A) the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and (B) other highly radioactive material that the Commission, consistent with existing law, determines by rule requires permanent isolation." The term "Commission" as used in the definition means the Nuclear Regulatory Commission.

Level Nuclear Waste Rail Transportation Inspection Policy[3] for all known rail shipments of SNF and HLRW. Under FRA Inspection Policy, there has never been a rail accident or incident involving the transportation of SNF or HLRW that has resulted in a release of the material from the packaging. Furthermore, there has never been a single death or injury resulting from a rail shipment of radioactive material.

Working with the Department of Energy (DOE), the Association of American Railroads (AAR), railroad labor organizations, and representatives of affected States, FRA developed the Safety Compliance Oversight Plan for Transportation of High-Level Radioactive Waste and Spent Nuclear Fuel. It must be emphasized that the SCOP is a living document that has evolved from 40 years of accumulated experience regarding the safe movement of nuclear materials by rail. FRA will continue to work in partnership with the rail community to periodically review, evaluate and update the SCOP to keep pace with the latest developments and technologies involving the safe transportation of nuclear materials. A sound and meaningful safety partnership involving all elements of the railroad community is absolutely essential for maintaining the highest degree of safety for railroad shipments of SNF and HLRW and for maintaining public confidence in our nation's nuclear materials transportation program.

In developing the SCOP, FRA has revised its previous policy to include the following safety enhancements in planning, inspection, training, and oversight activity areas:

Planning

FRA, DOE, the offeror or agent, and the rail carriers will consider track classification in the route selection process to ensure that the highest-rated track is utilized.

FRA will prepare an accident prediction model for the highway-rail grade crossings along the route. FRA will assist DOE in coordinating with appropriate state, local, and tribal agencies in route planning activities, using this model.

The Department of Transportation's (DOT) Office of Intelligence and Security will assist FRA in coordinating safety precautions, such as the identification of "safe havens," with the offeror, law enforcement officers, and intelligence communities.

Inspections

FRA will arrange for a track geometry car to operate over designated routes.

FRA will conduct visual inspections of bridges along the designated routes and review railroads' bridge inspection programs to ascertain structural integrity.

FRA will review the rail carrier's rail flaw detection vehicle data to ensure that a rail flaw detection vehicle has been operated over the designated route, and necessary rail repairs are made prior to shipments.

The SCOP requires that every train involved in the transportation of SNF and HLRW be equipped with a 2-way End-of-Train (EOT) braking device, regardless of train length. Prior to each shipment, and during each crew change point along the route, FRA will endeavor to inspect trains to ascertain that EOTs are operational.

Along a designated route, FRA will inspect all automated warning devices, at highway-rail grade crossings along the route, to ascertain that they are operational.

Training/Oversight

FRA will assist DOE, and the offeror or agent, in the development of Emergency Response training and safety briefings. FRA will liaison with the rail industry to verify that requisite training and briefings have been performed.

Prior to the first shipment, and at least annually for subsequent shipments, FRA will review emergency response plans for designated routes and recommend modifications, if necessary.

Prior to the first shipment, and at least annually for subsequent shipments, FRA will conduct the necessary reviews to ensure that train crews are properly certified, trained, and experienced in operating over the designated routes.

FRA will place Operating Practices personnel in the rail carriers' dispatching centers for the first shipment on designated routes, and will review dispatching procedures periodically for subsequent shipments.

Prior to the first shipment, and for subsequent shipments, as appropriate, FRA will focus on Operation Lifesaver training in communities along designated routes.

FRA will continue to prioritize complaints regarding designated routes, and will continue to expedite the investigation and resolution of these complaints.

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[3] See Appendix A "Federal Railroad Administration High-Level Nuclear Waste Rail Transportation Inspection Policy".

FRA will ensure that train crew personnel and carrier's emergency response personnel receive specific training or briefing concerning the nature of the shipment.

FRA will review the appropriate emergency response plans (offerer, carrier and DOE) to ensure that they adequately address the actions to be taken in the unlikely event of an accident or incident involving the train.

Railroads are equipped to handle heavy pieces of equipment, such as locomotives and other freight cars. Their "wrecking equipment" is mobile and can be dispatched to a derailment site within a matter of hours. It is FRA's position that the railroads have the infrastructure to handle a derailment involving a nuclear cask.

DENVER—SOUTHEST CORRIDOR LRT

Question. In the President's budget for fiscal year 2001, the Administration states its intention to enter into a Full Funding Grant Agreement (FFGA) for the Southeast Corridor in the Denver metropolitan area in the next year. Based upon what you know in regards to the schedule of the project at this time, when would the negotiations on the FFGA begin?

Answer. The Department expects the Record of Decision for this project to be issued in March 2000. Also in March, the grantee plans to request FTA approval for entry into Final Design. Following this, FTA will begin negotiations on the FFGA. This is expected to begin in the early spring of 2000.

Question. I understand that your people at the Federal Transit Administration (FTA) have been persistent in pressing for a reliable capital cost estimate for the Southeast Corridor project. That is a good and prudent thing to do. However, with the state and local match in place, the project can spend $63 million in federal dollars in fiscal year 2001, but the Administration requested $20 million. Such a deferral of federal funding will only delay the project, increase interest costs, and ultimately increase construction costs. Could you look through the New Starts program and determine whether there could be other funds committed to Denver's Southeast Corridor project in fiscal year 2001 that could be spent in fiscal year 2001?

Answer. When developing the recommended fiscal year 2001 budget, FTA first recommended funding for the 14 existing FFGAs in accordance with the Federal commitment schedule. When developing the recommended fiscal year 2001 budget for the new FFGAs, FTA recognized that most, if not all properties, would not receive the amount of funds they desired or would be optimum for the project in fiscal year 2001. With the commitment of fourteen existing FFGAs, there was only $211.7 million available in fiscal year 2001 for other projects in the pipeline. In fiscal year 2001 seven of the existing FFGAs should be completed freeing up more funds for the new FFGAs in fiscal year 2002 and beyond. FTA is not aware of any other New Starts funds available for Denver for fiscal year 2001.

Question. Last November, voters in Colorado overwhelmingly supported a referendum to financially support the Southeast Corridor and other projects. How does this strong showing of support translate into making this project more competitive in relation to other projects? Also, were there any other cities that have passed a similar referendum in the past?

Answer. Prior to the November referendum, the Regional Transit District (RTD) and Colorado Department of Transportation did not have a committed source of local funding for the Southeast Corridor project. The commercial paper bond revenues authorized by the vote are expected to generate $320 million, or over 90 percent of the local funding required to implement the project. This new committed funding source improved the projects capital plan rating from Low-Medium (reflected in the fiscal year 2000 Report on New Starts) to Medium-High. This rating is consistent with other projects which are in the latter end of the preliminary engineering stage of development and which have a significant amount of local funding commitments.

A few other areas have passed referendums, which provide for dedicated and stable revenue sources for fixed guideway transit systems, including Seattle (in 1996), San Diego (1987), and Orange County, CA (1985).

QUESTION SUBMITTED BY SENATOR FRANK R. LAUTENBERG

CIVIL AVIATION—ARGENTINA

Question. As you know, Newark International Airport has become a major international hub to Europe and Latin America. However, New Jersey does not have service to a major South American country—Argentina. It is critically important that New Jersey get access to Argentina this year. I know that you have an Argentina route case pending before the Department so I will not ask you to predict which

carrier will get the first frequency. However, I am concerned about reports that the government of Argentina may withdraw the new frequencies that are currently the subject of your route case because of the deteriorating condition of Aerolineas, the Argentine national airline. Could you please comment on this issue?

Answer. The new government is reviewing the open-skies agreement with the United States and has indicated that they would like to come to Washington in March to hold informal discussions. The Department is not prepared to reopen the deal. The Department understands the importance to Newark of securing nonstop service to Argentina.

QUESTIONS SUBMITTED BY SENATOR ROBERT C. BYRD

EMERGENCY RELIEF

Question. Mr. Secretary, you are very familiar with the Emergency Relief program from your experience as Federal Highway Administrator. You have flown into many disaster-torn areas to assure the citizens that their bridges will be rebuilt and their roads will be repaired. In years past, whenever the requirement for emergency relief exceeded $100 million per year, the Administration proposed an emergency supplemental to pay for these grants. This year, you are proposing that almost $400 million of these costs be absorbed by the core highway program. This proposal will result in large amounts of funding being drained away from those states that have not had substantial natural disasters in order to pay off the applications of those states that have, like California, and others. What explains this change in policy on the part of the Administration?

Answer. For any given year, it would be appropriate to request a supplemental appropriation when emergency relief needs exceed the $100 million included in TEA–21. However, what FHWA has seen is that emergency relief needs have consistently outpaced the authorized funding level. The $398 million of additional contract authority reflects the ten-year average of Emergency Relief supplementals, excluding Loma Prieta, plus sufficient funds to pay off the current balance over three years. The Department reviewed several options for addressing the backlog of emergency relief needs, but did not address the underlying cause of this crisis. The $100 million authorized for emergency relief is clearly not sufficient for the level of need. The Emergency Relief Reserve Fund will provide a more long-term solution, and will prevent another crisis from developing.

Question. Aren't many of your pending emergency relief applications a result of Hurricane Floyd and Hurricane Dennis? Why is the Administration requesting emergency supplemental appropriations in other agencies for these disasters but not in your agency?

Answer. The Department estimates that only about 14 percent of the emergency relief backlog can be attributed to Hurricanes Floyd and Dennis. It is clear that even if these two events did not occur, there would still be a substantial backlog of unmet needs. Although a supplemental request would address the immediate needs following these two hurricanes, the Department has proposed creating a new Emergency Relief Reserve Fund in order to address the long-term emergency relief needs of the country.

Question. Mr. Secretary, the balance of unfunded applications for emergency relief has been growing for several years, and the Administration has balked at requesting an emergency supplemental appropriation to cover them. Can you explain the Administration's rationale behind requesting almost $1 billion for assistance to Colombia, while leaving the nation's highway emergency needs in the cold?

Answer. The Administration's budget request is not leaving the nation's highway emergency needs in the cold. The Department has requested $398 million in additional contract authority above and beyond the $100 million authorized funding level each year. This funding level would be sufficient to cover the current backlog over the next three years, and prevent another backlog from developing.

QUESTION SUBMITTED BY SENATOR CHARLES E. GRASSLEY

Question. As you know, over the past several years, we have been working closely with the state attorneys general, led by Tom Miller, to address factors that are limiting increased airline competition in various parts of the country, including Iowa. We have talked about the issues impacting the future of competition. As you have recognized, in some cased large air carriers utilize anti-competitive behavior to drive new entrants out of the markets.

Last spring, Mike Hatch, the state attorney general for the state of Minnesota, asked the Department of Transportation to investigate actions taken by Northwest Airlines to drive Sun Country out of its market. In November of last year at a Congressional hearing, Nancy McFadden, DOT's General Counsel stated: "We are concerned about anti-competitive behavior. Currently, we have two preliminary investigations underway brought by AirTran and Sun Country."

Unfortunately, DOT has yet to take any action in response to either complaint. Please provide this committee with an update on the complaints of anti-competitive behavior filed last year by Minnesota Attorney General Mike Hatch and AirTran Airways. Also, when will formal action be taken on these complaints?

Answer. Regarding AirTran's complaint, the Department continues to conduct extensive analyses of the information AirTran and Delta report to the Department, and the Department is considering whether to request additional information from Delta.

Regarding Attorney General Mike Hatch's complaint about how Northwest Airlines has responded to Sun Country's entry into several Twin Cities markets, the Department requested Northwest's comments on his complaint. The comments received from Northwest did not address all of the Department's concerns, and the Department has therefore continued the informal investigation into the matter. DOT will soon have access to information that can be used to further assess Northwest's capacity and fare responses to Sun Country. This is detailed information that the airlines are required to file with the Department, and Sun Country's first report has just become available for review.

SUBCOMMITTEE RECESS

Senator SHELBY. Thank you. The subcommittee stands in recess.

[Whereupon, at 12:40 p.m., Thursday, February 10, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

THURSDAY, FEBRUARY 24, 2000

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:05 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Richard C. Shelby (chairman) presiding.

Present: Senators Shelby, Lautenberg, and Murray.

DEPARTMENT OF TRANSPORTATION SAFETY INITIATIVES—FISCAL YEAR 2001

DEPARTMENT OF TRANSPORTATION

U.S. COAST GUARD

STATEMENT OF VICE ADMIRAL JAMES C. CARD, VICE COMMANDANT

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

STATEMENT OF ROSALYN G. MILLMAN, ACTING ADMINISTRATOR

RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

STATEMENT OF KELLEY S. COYNER, ADMINISTRATOR

FEDERAL RAILROAD ADMINISTRATION

STATEMENT OF JOLENE MOLITORIS, ADMINISTRATOR

OPENING STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. The committee will come to order. Good morning. The Committee on Transportation will meet today.

Of the oversight responsibilities that we have on this subcommittee, none is more important than safety. Generally, we tend to incorporate our safety concerns into program oversight and into our review of the Department's management and funding issues.

However, I believe it is very useful, every once in a while, to focus exclusively on safety issues as a way to get a better sense of what safety considerations are of paramount concern to individual safety agencies and to my colleagues on this committee.

I will take this opportunity to express my concern about the impact of the proposed aviation firewall on safety programs at the Department of Transportation.

Three of the agencies appearing before us today, the Coast Guard, the Federal Railroad Administration, and the Research and Special Programs Administration, are funded entirely from nonfirewall discretionary dollars, and more than half of the funding for the National Highway Safety Administration, or NHTSA, is nonfirewall general funds as well. So, each of these witnesses has a very real stake in ensuring that discretionary funds are kept exactly that way, discretionary. Only by maintaining this discretion and flexibility can we respond to the priorities expressed in your budget request and through those expressed by Congress.

We have stacked votes starting at 11:30, so I will submit the remainder of my statement for the record in order to maximize the time we have to discuss the issues with our panel.

Today we have as witnesses Vice Admiral James C. Card, Vice Commandant of the U.S. Coast Guard; Ms. Rosalyn Millman, Acting Administrator of the National Highway Traffic Safety Administration; Ms. Kelley Coyner, Administrator, Research and Special Programs Administration; and Ms. Jolene—is it Molitoris?

Ms. MOLITORIS. Yes, it is.

Senator SHELBY. Molitoris, Administrator of the Federal Railroad Administration.

They will discuss various safety programs and related initiatives in each of the agencies' budget requests. Because we have a very limited amount of time and four very different agencies represented today, I will ask all the witnesses to keep your statements extremely brief. I will put your written statement in the record for the staff and other members to read and this Senator especially. They will be submitted for the record without objection.

Senator Lautenberg.

STATEMENT OF SENATOR FRANK R. LAUTENBERG

Senator LAUTENBERG. Thanks, Mr. Chairman. As usual, they say you are on the money when you talk about firewalls, segregating some and not others. It would be awfully tough to work that way.

If you will indulge me, Mr. Chairman, I do not think I am going to be as brief as you would like me to be because I have, as you do I know, two other hearings this day. So, I am going to give my statement and I will hop around and I will be back to make sure that I support my chairman, my good friend.

I will miss him when I am not here, as well as all of you. This is kind of Lautenberg's last stand at the semi-helm anyway.

Senator SHELBY. His last stand. He is heavily armed, though.

Senator LAUTENBERG. Working with the Coast Guard, I am going to single the Coast Guard out and I hope that none of the other agencies represented here will feel slighted. I feel just as strongly about you, but the Coast Guard has one that has gotten a lot of attention lately and I want to focus on that. Working with the Coast Guard has been one of the very unique privileges of serving in the leadership of this subcommittee.

While I never failed to be impressed by the heroism and the hard work of the people in the Coast Guard, I must admit that I am

greatly disturbed by what I have been recently reading regarding the service's declining state of readiness. Those of you who are associated with the Coast Guard, Admiral Card and the others, know very well that I have been a strong supporter and I continue to be. I respect so much what you do. I often mention the array of assignments that you are given without the resources in many cases to do them, and you manage to get most of them done well.

But the focus is directed, as this body here requests—and I am talking about the U.S. Senate all together. I commend you and Admiral Loy, our Commandant, for the very direct and frank statements that he has made in recent months regarding the unavailability of rescue craft, the severe shortage that he faces in adequately trained people, and the great stress this situation places on the work force.

These problems should trouble all of us, but I find them especially troubling when I review the causes behind them. One of those causes is the very rapid change in the operational priority within the Coast Guard, if I may say, directed by the Government. And it appears that there are those within the Administration, the Congress, the Coast Guard itself that are determined to beef up the Coast Guard's role in the war on drugs at any cost, even at the cost of the Coast Guard's ability to safely execute its most fundamental missions here at home.

Mr. Chairman, at every hearing we have held this year, I have emphasized the need for balance when looking at our Nation's transportation needs, and nowhere is the need for balance more apparent than within the Coast Guard's budget.

Now, I am not opposed to anything that the Coast Guard is doing in the area of drug interdiction. I stand behind each and every Coast Guard person who is currently fighting the war on drugs in the Caribbean. But I would like to share some figures regarding this war on drugs and the toll that it is taking on the rest of the Coast Guard. These are not my numbers, Mr. Chairman. They come directly from the Coast Guard.

Beginning in 1995, the year after the huge migration of Haitian and Cuban migrants, drug interdiction activities began growing at a phenomenal rate. Indeed, since 1995, total spending of operational dollars just for drug interdiction has increased by over a quarter of a billion dollars, or 89.3 percent. Cutter hours devoted to drug interdiction have risen 85 percent, while aircraft hours have increased over 100 percent. And over the same 5-year period, the Coast Guard's operating budget has grown by only 15 percent.

So, the increased level of effort on drugs had to come from somewhere. One critical area that absorbed the cuts was the end strength in the Coast Guard. Even as its missions have expanded, total employment in the Coast Guard dropped by more than 7 percent over this period. Another area that paid the price is fisheries enforcement. Funding for fisheries enforcement actually declined more than 12 percent over this period. Cutter hours dropped 13 percent, while aircraft hours fell by more than a third.

Now, on the subject of aircraft hours, the Commandant's recent statements have been so forthright, and I respect him for it. Candor, I think, is the best way to approach problems. He has only so

many aircraft and too many of them are not usable because they have been cannibalized for spare parts.

In a speech this past December, Admiral Loy shared with us the unfortunate story about a boater that died in a storm off the California coast. When the distress call went in to the Coast Guard's air station in Sacramento, they only had one aircraft that was ready to deploy. Usually there would be at least one backup available to relieve it when it ran short of fuel. That station has four C–130 aircraft, but on that day, one of them was undergoing maintenance. And where were the other two? Well, one had not flown for more than 6 months because it had been cannibalized for parts. And what about the fourth? Well, it was out of the country doing drug patrols. In this case, the only available aircraft circled the distressed sailor who was alive but struggling in the terrible weather. The outcome was horrible. The sailor was never seen after that, and after a 6-day search, all they found was the debris.

Now, Mr. Chairman, the Coast Guard does wondrous things. We all admire the courage and the skill of the people who are out there in the worst of weather. In the 16 years that I have served on this committee, I have never seen the Coast Guard priorities get so out of balance. The situation is simply unacceptable, and as I look at the Coast Guard budget request for fiscal year 2001, I am not at all encouraged. It is true that there are some resources included in this budget to improve the deteriorated readiness of the Coast Guard. But the largest requested growth items in the budget are still for expanded and expensive drug interdiction activities.

I think we have to conduct this fight against drugs. I believe that it is a terrible blight on our constituents and our communities. But we have to make sure that we have a balance in what we are doing.

The largest increase is to deploy eight additional helicopters to the Caribbean exclusively for the drug war with specially mounted guns and specially trained crews. And they are good at what they do and I am glad that they are there for us. But we cannot afford to neglect the other responsibilities that we have given to the Coast Guard.

Mr. Chairman, the senior leadership of Congress, this subcommittee, the DOT, and the Coast Guard need to rethink the way we are allocating our resources. I support spending resources on drug interdiction, but we must first make sure that the Coast Guard can fully fund and execute its core missions here at home. It is not sufficient to ignore our activities here at home on a shoestring just so that we can expand our activities in the drug war. It is not fair to our recreational, commercial boaters, this maritime system that we have created in this country which is second to none. It has created this whole, gigantic marine industry as a result of the Coast Guard's imprint on how we navigate and how we rescue and how we signal. It is a wonderful thing. I know I am a miscreant sailor and I can tell you. It is not fair to the members of the Coast Guard who are charged with rescue.

Mr. Chairman, the Vice Commandant is here with us today because the Commandant is participating in the announcement of the findings of the President's Council on Coast Guard Roles and Missions. That council has taken a comprehensive look at the Coast

Guard's current roles and missions and concluded there are not any major Coast Guard missions we can do without. Not one of them. The committee, like Congress, does not want the Coast Guard to lessen its level of effort in any area. We want you to be magicians. That is what it is. If that is the case, then we need to think in terms of funding all of the Coast Guard's missions adequately. It is simply not acceptable to take from one to pay for another.

Now, in focusing my statement on the Coast Guard this morning, I do not want to diminish in any way the important contributions made by the other agencies represented here. So, forgive me if this was the focus. The work all of you do is very important, as well as the people with whom you work. So, I welcome all the witnesses here this morning.

Mr. Chairman, I apologize for taking so long but appreciate this opportunity to blow off some steam.

Senator SHELBY. Thank you.

Vice Admiral Card.

STATEMENT OF JAMES C. CARD

Admiral CARD. Good morning, Mr. Chairman and distinguished members of the subcommittee. I am Vice Admiral Jim Card, Vice Commandant of the Coast Guard, and it is my pleasure to appear before you today to discuss the Coast Guard's maritime safety mission.

I want to take a second to thank Senator Lautenberg for his support over the years. He has been a great supporter of the Coast Guard. He really understands us very well, as we could tell from your statement.

Ensuring the safety of mariners and passengers has always been a mainstay mission of the Coast Guard. We are widely recognized as an international leader in marine safety and search and rescue, and certainly while we have evolved to a highly effective multimission service, we have maintained our leadership in excellence in the safety arena. For us safety is job one.

Our safety aim is to eliminate deaths, injuries, and property damage associated with marine transportation, fishing, and recreational boating. We do so by balancing prevention programs, response capability, and investigation services. Prevention is the key to improving safety in the marine world. We focus our activities on areas of greatest risk.

Because most maritime accidents are the result of human error, the Coast Guard is increasingly focused on efforts to improve human performance. Our overarching strategy to do so is the "Prevention Through People" program whose vision is to achieve the world's safest, most environmentally sound, and cost-effective marine operations by emphasizing the role of people in preventing casualties and pollution. Key to this is knowing more about how people operate and what causes problems.

Our 2001 budget requests a modest $400,000 to institute a program to capture near-miss and accident data. The system is called the International Maritime Information Safety System, IMISS, and it holds much promise.

Another important and successful prevention program put together over the past several years has been our Port State Control program. We have seen in the last 2 years a great reduction in the number of foreign vessels which do not pass our Port State Control examination entering our country.

But when prevention efforts all fail, the Coast Guard responds with boats and cutters and aircraft. These search and rescue efforts are our most well-known capability, and like calling 911, Americans expect someone to respond to their distress calls when on the water, and we do so with pride. In an average year, the Coast Guard responds to more than 40,000 emergency calls, saving about 4,000 lives and assisting 80,000 mariners in need of non-emergency assistance. Often we work in partnership with other Government agencies, State and local officials, to get this job done.

In the 2001 budget submission, there are several initiatives aimed at restoring our readiness and improving maritime safety, prevention, and response capabilities for the future. Probably the most important is the Deepwater Capability Replacement Project. It is vitally important.

Our National Distress and Response System Modernization Project will improve our ability to quickly find those in distress and be able to respond. Ports and Waterways Safety Assessments will greatly assist vessel traffic in sorting that out. Providing personal protective gear for our crews who are on the front line. Focusing on commercial vessel safety. Having more people in those surf stations with breaking bars.

And probably on the operations side, most important is the personnel support initiatives to help us restore and maintain our work force.

There are, however, safety challenges we have. Passenger vessel safety as it relates to vessel size and speed for commuter vessels. And the numbers increase. We always have to focus on prevention and response.

Commercial fishing vessel safety, while we have improved in the last 5 years with a 30-percent reduction in deaths, is still one of the Nation's most hazardous occupations and one that the Coast Guard has little regulatory control over. We have to focus on human error, dockside examinations. We have operations on each coast, *Safe Catch* and *Safe Return*.

The Marine Transportation System initiative, which we put together. Volume will double in this country in marine transport in the next 20 years. We have to make sure we are ready to take all the safety precautions that we need in that area.

Probably our biggest challenge and the one that the Senator has outlined is our people. We have to make sure we have the right people, the right training, and the right equipment to carry out all these important missions.

Today, Coast Guard men and women will save 11 lives and prevent countless marine accidents. They are dedicated and professional and very proud to serve their country. I am honored to be one of their leaders. I asked you to honor them by fully supporting the President's 2001 budget.

PREPARED STATEMENT

Thank you for this opportunity to discuss this important issue with you, and I will be happy to answer your questions.

Senator SHELBY. Thank you.

[The statement follows:]

PREPARED STATEMENT OF JAMES C. CARD

Good morning, Mr. Chairman and distinguished members of the Subcommittee. I am Vice Admiral James Card, Vice Commandant of the United States Coast Guard. It is a pleasure to appear before you today to discuss the Coast Guard's maritime safety mission and related initiatives. Safety permeates most Coast Guard activities, and the President's fiscal year 2001 budget requests $973 million, a 6-percent increase over fiscal year 2000, for Coast Guard safety programs. This testimony, however, focuses on specific safety projects and initiatives designed to enhance safety.

COAST GUARD STRATEGIC GOAL: MARITIME SAFETY

The Coast Guard adheres to five strategic goals in providing service to the American people: Maritime Safety, Maritime Security, Protection of Natural Resources, Maritime Mobility, and National Defense. Today, we are here to discuss the Coast Guard's role in Maritime Safety as it relates to the bigger scheme of Transportation Safety. Specifically, our safety aim is to "eliminate deaths, injuries, and property damage associated with maritime transportation, fishing, and recreational boating." Ensuring the safety of mariners has always been a mainstay mission of the Coast Guard. America depends on the Coast Guard to provide safe, efficient, and environmentally sound waterways for a myriad of commercial and recreational users. Competing demands on America's waterways—commerce, national security, public health and safety, environmental concerns, recreation, fisheries, and more—must be balanced. However, safety is integrally linked to all these concerns. Our efforts to achieve the Maritime Safety strategic goal are manifested through a systematic, risk-based approach that looks at the relative degree of probability versus consequences. This systematic approach consists of:

—Prevention—minimizing the likelihood of a casualty;

—Response—minimizing the consequences of a casualty; and

—Investigation—which links lessons learned back to future prevention efforts.

Our most complex safety challenge is preparing for the low probability but very high consequence event.

PREVENTION

Our prevention activities focus on areas of greatest risk, which consider both the probability of an incident occurring and the resultant consequences. To better assess and respond to risk, we look at it through different lenses, such as type of maritime activity or type of causal factor. Regardless of activity type, most maritime incidents resulting in death, injury, or property damage are the result of human error; therefore, Coast Guard efforts will continue to support the "Prevention Through People" concept.

The Coast Guard's Prevention Through People (PTP) program is an outstanding example of government working with industry to make transportation safer. The concept is simple: working together we can change the corporate culture and address the majority of accidents, which are rooted in human performance. Implementation is not so simple, but by working with industry and labor leaders the culture change is occurring, both domestically and internationally. To encourage this concept, the Coast Guard has entered several partnerships with the different segments of the maritime industry.

Recreational Boating Safety

Recreational boating is second only to highway travel in U.S. transportation fatalities. The recreational boating population continues to grow rapidly. While recreational boating fatalities have decreased over the last three decades, the number of deaths has leveled (roughly 800 annually) over the last several years. Again, human error is the most common cause of fatal accidents, and failure to use life jackets is the most common cause of death following these incidents. The Coast Guard coordinates a Federal-State recreational boating partnership, consisting largely of administering a Boating Safety Grant program. Although recreational boating safety (RBS) is largely a state responsibility, failure in RBS directly impacts

the Coast Guard: 70 percent of the Coast Guard's search and rescue (SAR) case load results from recreational boating incidents.

The Coast Guard has three primary initiatives in the area of recreational boating safety: enforcement, response, and education. To enforce compliance with laws designed to minimize accidents on the water, we conduct about 50,000 boardings of recreational boats each year. When things do go wrong, we respond to about 40,000 search and rescue cases each year. Our major thrust, though, is in the area of prevention. To that end, through the dedicated efforts of our Auxiliary volunteers, we conduct 150,000 Courtesy Marine Examinations of recreational boats each year. Also, we teach boating safety to 250,000 people each year in formal classes, give over 2,800 safety lectures, and operate safety information booths over 6,500 days annually. In 2000, we are expanding our Courtesy Marine Examination program by authorizing members of the United States Power Squadrons to conduct these exams under the direction of the Auxiliary, and in the near future we will similarly involve some States in this program, in coordination with the National Association of State Boating Law Administrators. As you can see by these numbers, our civilian volunteers play a substantial and vitally important role in enhancing the safety of their fellow boaters.

Commercial Vessel Safety

The largest percentage of maritime worker fatalities occurs in commercial fishing, one of the nation's most hazardous occupations and an industry over which the Coast Guard has little regulatory authority. The Coast Guard is focusing on reducing human error, along with enforcement of safety regulations, to reduce accidents in the commercial fishing industry.

In the short term, we will increase our presence on fishing docks with the goal of greater interaction on common safety goals of fishermen and the Coast Guard. The Coast Guard conducts voluntary dockside examinations of commercial fishing vessels in order to ensure that all required safety equipment is on board and maintained properly. These voluntary exams have proven to be an effective tool in reducing risk and loss of life. Our fiscal year 2001 budget requests $0.6 million to enable us to work with the fishing industry to increase the number of fishermen who participate in these safety examinations.

Other short-term plans will increase local outreach through the sharing of best practices and lessons learned from accident investigation reports, as well as regional media campaigns designed to improve overall community awareness of the causes of vessel losses, ways to increase the fishermen's chances of survival, and the positive impact of dockside examinations on safety.

While other commercial vessels (i.e., tankers, freighters, towboats) have lower fatality rates than the fishing industry, the Coast Guard is working to improve safety aboard these vessels as well.

Our passenger vessel safety program is carried out through a regime of international and domestic safety standards. Compliance programs ensure that vessels meet these standards. Development of standards began back in the mid-1800s and continues today. It is a continuous improvement process of incorporating new technology, lessons learned, and knowledge gained from casualty investigations, practical experience, and research and development projects. Much of the history of the regulation of maritime safety has been reactive: disasters followed by legislation. Maritime safety has transitioned from the historical "reactive" approach to today's proactive, systematic, risk-based approach, exemplified by the Passenger Vessel Safety Act of 1993, which focused on passenger vessels evading inspection through charter arrangements. The risk posed by these vessels was recognized before casualties occurred, and action was taken to prevent casualties.

Our standards address both variables in the risk equation: the probability that something will go wrong and the resulting consequences should it occur. Our approach is to reduce the probability of an accident through prevention programs and continual improvement of our response capability.

We are continuing our leadership and participation with the International Maritime Organization (IMO) to improve international safety standards, especially efforts to increase flag state compliance and accountability. Our Port State Control (PSC) initiative has been successful in improving compliance and consistency by PSC authorities around the world. Of the 7880 foreign-flag ships that arrived in the U.S. in 1998, 373 were detained because of their substandard condition. In 1999, only 260 foreign flag ships were detained, a 30 percent decrease from 1998, and a 52 percent reduction in the last two years, representing an increased level of safety in the foreign fleet visiting our ports. The number of arriving vessels has remained consistent, and we examined a similar number of vessels. Our risk-based matrix ap-

pears to be successful in screening all arriving vessels to ensure that the highest risk vessels are boarded.

Other Prevention Initiatives

In addition to maintaining about 50,000 aids to navigation on U.S waterways, the Coast Guard also operates Vessel Traffic Services in major U.S. ports. The Ports and Waterways Safety Assessment (PAWSA) is a formal risk assessment process that employs an open dialogue with port users in order to identify minimum user requirements and candidate ports for Vessel Traffic Services (VTSs). It is a risk-based decision making process that relies on user consultation to determine the risk drivers and appropriate vessel traffic management measures for mitigating that risk. The process requires the participation of professional mariners with local expertise in navigation, mobility, and port safety, as well as port stakeholders with a vested interest in the environmental, public safety, and economic consequences of marine activity. Ten ports have completed the PAWSA process. In each case, it has been well received by the port community and the agencies that regulate the port. From these sessions, we have provided the local port with a baseline of risk from which periodic reassessments can be conducted, and we have identified safety concerns that need to be addressed. Using information gathered during these efforts, we can conduct comparative and cost benefit analyses to evaluate solutions that meet the needs of the waterway users and are cost effective. As we gain more experience in the process, and as supporting guidance and other tools evolve, we believe PAWSA will improve to the point where it will be usable by any field unit without extensive outside support.

We see many opportunities to employ new technologies to improve safety such as those employed in intelligent transportation systems. For example, the Coast Guard and various sectors of the shipping and carrier industry are working to finish development of a new navigation safety tool called AIS, or Automatic Identification System. AIS will give mariners the ability to integrate several different technologies to improve their own navigation and their knowledge of other vessels around them. AIS incorporates electronic chart systems; the Department of Defense's Global Positioning System (GPS); differential GPS, a Coast Guard-operated high-precision local correction system for GPS; and a radio communications package linking AIS-equipped vessels. AIS will significantly improve navigation safety and collision avoidance, saving lives and preventing property loss, as well as significantly enhancing the protection of the marine environment. Through systems like AIS, we can provide the mariner with an array of integrated, accurate, and real-time information necessary for safe navigation of America's ports and waterways.

The International Maritime Information Safety System (IMISS) initiative is focused on the reduction of marine accidents through a voluntary reporting system that captures causal information, and lessons learned on maritime near-accident (near-miss) events (e.g., near collision situations, near-pollution events, etc.) modeled after the Aviation Safety Reporting System (ASRS). The Coast Guard, Maritime Administration, maritime industry, and recently the National Aeronautics and Space Administration (NASA) have been working together to put IMISS into place. It is also intended to capture related precursor events (hazardous situations) and lessons learned (e.g., crew fatigue issues, equipment maintenance issues, communication issues, etc.) that, but for some corrective action in the chain of events, did not result in the occurrence of an accident. The cost savings by preventing just one major accident involving a large loss of life or damage to the marine environment could be billions of dollars. Additionally, if we take this concept and apply it across all of the transportation modes and other applicable service industry segments, both the physical savings (lives and property saved and reduced damage to the environment) and the fiscal savings (private and public dollars saved) are higher still. We have an industry-based working group under the Society of Naval Architects and Marine Engineers (SNAME) with commitments from over 500 individuals and organizations to help us with the project. Our fiscal year 2001 budget request includes $0.4 million to continue development of this project.

RESPONSE

When prevention efforts fail, the Coast Guard responds with an appropriate combination of boats, cutters, and aircraft in order to mitigate injuries, property damage, and environmental damage. In order for response to work effectively, we must be promptly notified. Therefore, we not only focus on improving our search and rescue response, but also on increasing the ability of mariners in distress to notify us in time to permit a successful response.

Like calling 911, Americans expect the Coast Guard to respond to their calls for help at sea. Our responses include providing some form of emergency assistance to

approximately 80,000 people, saving approximately 4,000 lives from imminent danger. While most maritime casualties occur in near-coastal waters, it is certainly not true in every case.

In 1980, the Coast Guard coordinated the rescue of 519 passengers and crew from the passenger vessel PRINSENDAM 330 miles from Valdez, Alaska. In November 1998, after refueling both in Bermuda and at sea aboard a U.S. Navy destroyer, a Coast Guard helicopter crew from Elizabeth City, North Carolina, rescued all four crewmembers from the 42-foot sailboat KAMPESKA in 30-knot winds and 20-foot seas, approximately 400 nautical miles off the North Carolina coast.

In April 1999, crews aboard Coast Guard fixed and rotary wing aircraft risked winds up to 50 knots and seas as high as 30 feet to rescue two survivors, both experienced ocean sailors, from the overturned catamaran ACAPELLA approximately 800 nautical miles east-northeast of New York. These and other offshore cases are clear indicators of the need for a deepwater search and rescue capability. Our search and rescue efforts also transcend the bounds of the high seas and coastal waters.

The citizens of Grand Forks, North Dakota may never have considered how the Coast Guard touched their lives, but when the swollen Red River flooded their city, the Coast Guard was there to assist. And very recently, Coast Guard air and boat crews tirelessly rescued over 500 people, from New Jersey to North Carolina, stranded by devastating floods left by Hurricane Floyd. The dedicated professionals of the Coast Guard place themselves in harm's way every day while selflessly rendering assistance to others in distress.

Increased expectations not only come from the American public, but also from the international maritime community that looks to the Coast Guard as a world leader in the international field of search and rescue. Maritime commerce and travel are global activities that require a global safety system, and a vital aspect of that safety system is an effective global search and rescue response capability. The Coast Guard, along with some of our international partners in the SAR community, are recognized as leaders in developing a family of international treaties, such as the International Convention on Maritime SAR and the International Convention for the Safety of Life at Sea (SOLAS), which help provide a global maritime search and rescue capability.

We are also leaders in helping the IMO establish global SAR plans, procedures, techniques, and training. Our efforts are aimed at integrating SAR Regions (SRRs) encompassing the globe by working with individual countries responsible for their assigned regions. The SRR for which the U.S. Coast Guard is responsible encompasses about 50 percent of the North Atlantic Ocean and over 75 percent of the North Pacific Ocean, an area in excess of 28 million square nautical miles. Based on this framework, we have established bilateral agreements with various countries including Russia, China, Japan, and Mexico. We have also recently concluded a trilateral agreement among the United States, Canada, and the United Kingdom.

We have had some particularly noteworthy accomplishments in supporting the global SAR system. One of the jewels of our International SAR system is the Automated Mutual-assistance Vessel Rescue System (AMVER), which in 1998 celebrated 40 years of being a vital, real-world, real-time segment of the maritime safety system. Endorsed by the IMO, AMVER is a global ship reporting system with 12,000 ships participating from 143 nations, which constitutes 40 percent of the world's merchant fleet. On an average day, over 2,700 ships are on the AMVER "plot" that is maintained by the Coast Guard and are available to effect any necessary rescue or assistance in their transit area. AMVER has established an impressive lifesaving track record considering that more than 1,400 lives were saved between 1993 and 1998. In just one case in 1994, six AMVER ships successfully rescued 504 passengers from the Italian cruise liner ACHILLE LAURO, ablaze off the coast of Somalia. Though AMVER is administered and maintained by the United States Coast Guard, it is indeed a global system available as a very powerful and effective lifesaving tool to rescue organizations throughout the world. It is an extremely valuable component of the overall SAR response posture.

The Coast Guard is also a primary supporter and the world's largest user of the multinational Cospas-Sarsat system. This satellite-based system is an extensive network that provides global satellite coverage for the detection of distress beacons on land or at sea, detecting Emergency Position Indicating Radio Beacons (EPIRBs) from ships and Emergency Locator Transmitters (ELTs) from aircraft.

Moreover, the Coast Guard was instrumental in contributing to a new International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual that was recently developed and published by both IMO and the International Civil Aviation Organization (ICAO). For the first time, this three-volume set provides consolidated guidance to nations on the administration, organization, and execution of search and rescue. It is being heralded as a landmark document of international coopera-

tion. We are, in fact, adopting the IAMSAR Manual as the National Search and Rescue Manual of the United States. Additionally, our personnel are working closely with developing nations to help them model their maritime services after the U.S. Coast Guard, since their missions are more akin to ours than they are to those of a blue water navy.

Several other initiatives have been undertaken to "raise the safety bar." Our fiscal year 2001 budget requests $3.1 million to continue worldwide implementation of the Global Maritime Distress and Safety System (GMDSS), which will significantly enhance maritime communications and maritime safety. We can, for example, for the first time broadcast urgent marine information broadcasts, including weather warnings, and ensure that every GMDSS ship in our areas of responsibility immediately gets the information we broadcast. GMDSS includes a redundant capability to ensure that if one device becomes inoperable, another component can be used to send a distress alert or communicate distress information. Finally, the system is designed to include location and identification information in every distress alert. Some segments of GMDSS pay very big dividends: in 1997 alone, over 540 lives were saved through the use of EPIRBs.

Another critical safety enhancement is our initiative to re-capitalize the National Distress and Response System Modernization Project (NDRSMP). The Coast Guard is recognized as a world-class rescue organization, but we can only be as effective as the system we use to monitor distress calls. As proposed, NDRSMP will improve Federal, State, and local command and control communications within port areas during emergency situations by providing complete VHF radio coverage of coastal areas and navigable waterways where commercial and recreational traffic exists. The new system will also automatically record and play back distress calls, and allow Coast Guard watchstanders to slow them down and adjust the quality until the message can be understood. It will also determine and preserve an electronic fix when a distress signal is received. NDRSMP is a national priority and is an absolute must to ensure America's waterways remain safe.

INVESTIGATION

The marine community is incredibly diverse, with a wide array of vessel types, sizes, and equipment that varies across a broad range of commercial and recreational activities. The Coast Guard is both a seagoing Service with substantial experience operating its own vessels as well as the primary regulator of the marine industry. Each year, the Coast Guard investigates approximately 5,000 marine casualties. Coast Guard inspectors and investigators are unmatched in their expertise, gained through thousands of daily interactions on the waterfront and the ocean with the full spectrum of vessels and marine facilities. This expertise gives the Coast Guard a unique ability to focus quickly and accurately on the most likely causes of a marine casualty.

Investigations of casualties provide critical information about the safety risks of specific vessel types and operating conditions that help the Coast Guard to better target its prevention efforts. The Coast Guard has broad and robust technical expertise in naval architecture, marine engineering, and salvage, as well as a strong seagoing expertise by the very nature of the service. That expertise is necessary to focus quickly on potential causal factors which can be extraordinarily complex in marine systems. The current process allows the Coast Guard to take the lead in investigations it deems most vital in refocusing prevention programs. By virtue of its extensive experience with the maritime community and its regulatory role, the Coast Guard is the agency best able to focus the investigation quickly and efficiently and then implement any needed changes to immediately improve marine safety. In cases in which an investigation uncovers safety issues that appear urgent, the Coast Guard is able to issue safety alerts quickly and commence regulatory program changes based on compelling interim findings. For example, following the sinking of the amphibious passenger vessel MISS MAJESTIC at Hot Springs, Arkansas, in May 1999, the first safety alert was issued 5 days after the incident, the second 13 days after the first alert.

CONCLUSION

In many cases, it is not the breadth but the pace of change that challenges us. The growth of international maritime trade will inevitably jump sharply in the next twenty years. Some estimates place the increase between 200 and 300 percent of current levels. The number of U.S. passengers has been steadily increasing over the past decade due, in part, to the increased use of high-speed commuter ferries traveling at over 40 knots and new passenger ships designed to carry 5,000 people. This contributes significantly to increased waterways use, congestion, and risk. However,

we recognize this trend and are working to offset the increased risk through our prevention, response, and investigative efforts, both internationally and domestically.

To ensure the viability of a Coast Guard that will meet the nation's safety needs in the future, we request your support of our fiscal year 2001 budget request, which provides the necessary resources to support our work force adequately, especially in light of the stark competition to attract and retain quality people in today's economy. Coast Guard men and women carry out their duties in a harsh and dangerous environment on a daily basis. To ensure the safety of our people, we must continue to provide them with modern tools and properly maintained equipment so they can carry out their duties in the most efficient manner possible.

Toward that end, the Deepwater project will begin the recapitalization of our aging fleet of vessels, aircraft, and C4ISR (command, control, communications, computers, intelligence, sensors, and reconnaissance) assets with an integrated system that will not only fill capability, technology, and logistics gaps, but will also enable us to meet the maritime challenges we foresee in the 21st century. The Coast Guard's fiscal year 2001 budget requests $42.3 million to complete planning and design work prior to initiation of specific construction projects.

Thank you for the opportunity to discuss this important issue with you today. I will be happy to answer any questions you may have.

STATEMENT OF ROSALYN G. MILLMAN

Senator SHELBY. Ms. Millman.

Ms. MILLMAN. Mr. Chairman, I appreciate the opportunity to make my first appearance before the subcommittee and discuss critical highway safety issues.

I also want to express my pleasure at appearing today with my colleagues testifying in the one DOT way that we approach transportation safety.

SAFETY MISSION REQUIRES INNOVATION STRATEGY

The fiscal year 2001 budget estimate for the National Highway Traffic Safety Administration reflects President Clinton's and Secretary Slater's highest transportation priority: safety. Motor vehicle crashes are the leading cause of death for Americans between 5 and 29 years old and account for more than 90 percent of all transportation fatalities.

Secretary Slater's goal is to reduce by 20 percent the number of traffic deaths and injuries from 1996 to 2008. Success will have far-reaching national implications in terms of lives saved, injuries avoided, and families kept intact.

NHTSA's missions are to reduce the number, rate, and severity of motor vehicle crashes and to enable States and local communities to solve their unique traffic safety problems. Our safety strategy will succeed or fail, depending on our ability to embrace innovation. Business-as-usual approaches will not accelerate our drive for safer vehicles and roadways. Accomplishing these objectives demands attention to both crash avoidance, such as reducing alcohol impaired driving and decreasing rollover propensity; and crash worthiness—better head protection and increased child safety seat usage, for example.

The fiscal year 2001 budget estimate provides the resources, more than $499 million, an increase of $133 million over the fiscal year 2000 level, for an ambitious program to foster a climate of safety innovation through regulatory and non-regulatory approaches, new ways of doing business, and supporting research and development.

FOUR PROGRAM COMPONENTS

Our successful programs generally have four components: partnerships, strong laws, vigorous enforcement, and public information and education. Mr. Chairman, my written statement provides more details about NHTSA's highway safety improvement approach.

FISCAL YEAR 2001 INITIATIVES

In the time remaining, I would like to highlight a few of NHTSA's fiscal year 2001 initiatives.

NHTSA proposes a concerted research program on crash protection for older occupants, a supporting research and development effort that will provide important information for the future of highway safety. Elderly people are much more likely to die than younger people in comparable motor vehicle crashes. The proposed research, through our National Transportation Biomechanics Research Center, will yield more accurate injury measurements and thresholds and alternative occupant restraint systems that improve protection and survivability.

NATIONAL ADVANCED DRIVING SIMULATOR

Also under the umbrella of supporting research and development, NHTSA proposes studies using the soon-to-be-completed National Advanced Driving Simulator. This state-of-the-art facility with the University of Iowa will enable us to examine under controlled conditions such driving behavior scenarios as driver fatigue and inattention, skill degradation among older drivers, and distraction from the driving task that new in-vehicle technologies, such as wireless telephones, may cause. Mr. Chairman, completion of NADS would not have been possible without the very strong support from this subcommittee. We thank you.

SAFE PASSAGES FOR YOUTH

The fiscal year 2001 budget estimates include about $11 million for NHTSA's proposed initiative, Safe Passages for Youth. The 16- and 17-year-olds have the highest rates of fatal crash involvement per vehicle mile traveled. New strategies are essential helping our young people save their own lives. A program using each of the four parts, partnerships with organizations that work specifically with teenagers, strong laws such as zero tolerance and graduated driver's licenses, vigorous enforcement, and public information and education, have the best potential for increasing seat belt use, reducing under-age drinking and driving and encouraging compliance with posted speed limits and discouraging aggressive driving behavior.

MINORITIES AND RURAL POPULATIONS

Highway safety in America has improved but not uniformly across the country. Minorities, including African Americans and Hispanics, and rural populations are over-represented in highway crash and injury statistics. Rural residents are about 25 percent of the U.S. population, but motor vehicle crashes in rural areas account for 60 percent of all fatalities.

Senator SHELBY. How do you define rural resident? How is that defined?

Ms. MILLMAN. We use the Census definition.

Our fiscal year 2001 budget contains a new initiative, Target Populations, to help NHTSA hone its traffic safety information and education methods to communicate more effectively with these groups.

ADVANCED AIR BAGS

No traffic safety issue during my tenure is likely to receive more public attention than advanced air bags. Since NHTSA announced its November 1996 strategy to improve air bag safety, the agency has conducted investigations, issued safety advisories to the public, researched injury patterns, and consulted with numerous organizations, such as safety advocates and manufacturers. The final rule will greatly benefit from these activities, and we are committed to issuing the rule in accordance with the TEA–21 schedule.

CONCLUSION

Road safety in America has improved greatly since the Federal program began in the 1960's. The fiscal year 2001 budget estimate now before your subcommittee seeks to build on our past successes and develop new knowledge and methods to overcome the remaining obstacles to the highest level of safety.

PREPARED STATEMENT

Thank you, Mr. Chairman, and I would be pleased to answer any questions.

Senator SHELBY. Thank you.

[The statement follows:]

PREPARED STATEMENT OF ROSALYN G. MILLMAN

Mr. Chairman, it is a pleasure to appear before the subcommittee, along with my colleagues, to discuss important transportation safety issues. Testifying together today symbolizes the ONE DOT strategy we follow in working together to improve overall transportation safety. I am especially pleased to have the opportunity to thank the subcommittee for its past support of the National Highway Traffic Safety Administration's (NHTSA) programs and efforts to provide innovative approaches to reducing the number of traffic fatalities and injuries, and the costly human and economic consequences of motor vehicle crashes. I look forward to working closely with the subcommittee in continuing to develop a successful national highway safety program.

HIGHWAY FATALITY TRENDS

Transportation safety is one of this Administration's top priorities as we enter the 21st Century. The mandates of the Transportation Equity Act for the 21st Century (TEA–21) clearly place NHTSA in the forefront of national highway safety leadership in developing and implementing innovative programs. The fiscal year 2001 budget request of $499.5 million will enable us to meet the greater challenges of this role and to build on our solid record of success. We are witnessing impressive inroads in solving highway-related fatality and injury problems, coming ever closer to our 2008 goal to reduce highway-related fatalities and injuries by 20 percent. Our unflagging leadership has resulted in the lowest highway traffic fatality rate on record, a low of 1.6 fatalities per 100 million vehicle miles traveled. In 1998, traffic injuries were down by 156,000 from 1997. Alcohol-related highway deaths are at a historic low of 38 percent. Seat belt use is at an all-time high of 70 percent. And, Mr. Chairman, from 1975 to 1998, NHTSA programs related to restraint use, motor-

cycle helmet use and underage drinking laws have accounted for 155,000 lives saved.

Yet, much remains to be done. Reaching our 2008 goals requires more creative approaches to on-going and newly identified traffic safety problems, resulting from new technologies, expanding demographics, and changing driving behavioral patterns. To meet these increasing challenges, we plan to more creatively design integrated approaches to traffic safety issues and introduce several innovative programs, developed to address some of the most conspicuous and critical highway safety issues.

CRASH AVOIDANCE

Improving crash avoidance capabilities of motor vehicles is paramount in reducing vehicle-related injuries and deaths. Our Crash Avoidance and Driver Vehicle Performance initiative will study the underlying principles of crash prevention; examine advanced technologies to improve vehicle handling and stability; and conduct laboratory testing to assess vehicle rollover potential, especially that of sport utility and other high center of gravity vehicles. In addition, these crash avoidance activities will address questions concerning driver inattention and distraction; elderly driver safety, mobility, and driving challenges; and the tradeoffs between fitness to drive and mobility.

New technologies such as Automatic Collision Notification (ACN) systems have already been the subject of NHTSA operational field testing, through the Intelligent Vehicle Initiative program. This cross-cutting initiative involves other research programs as well, coordinating our efforts to obtain the best results for our investment. We are proposing to link the Special Crash Investigations program with an industry partner to perform in-depth investigations of crashes involving vehicles with ACN systems. Our program is also developing improved research methods for injury-prediction algorithms to enhance emergency medical system capabilities, thus enhancing ACN system value. We will complete research and development of an easily installed ACN system and evaluate the system cost in relation to its effectiveness in saving lives and in reducing time for rehabilitation and recovery.

HEAVY VEHICLE SAFETY

The Secretary of Transportation has placed a great deal of emphasis on improving heavy truck safety and has set an aggressive goal of reducing the number of truck-related fatalities by 50 percent in 10 years. Meeting this goal will require a concerted, multi-disciplinary effort by many parts of the Department. In support of that goal, NHTSA is proposing several initiatives for research to improve braking performance, use of disc brakes on tractors and trailers, use of adaptive suspensions to counteract incipient rollover and Event Data Recorder (EDR) research to capture information prior to and during crashes. This research will provide us with a clear understanding of crash causation and help to develop suitable countermeasures.

IMPAIRED DRIVING PROGRAMS

Although alcohol-related highway fatality statistics have been notably reduced, dropping to a record low of 38 percent in 1998, more effort is required to reach our goal of 30 percent, or 11,000 by 2005. Our programs propose more aggressive use of NHTSA partnerships and the strategies identified through the Partners in Progress: An Impaired Driving Guide for Action program. Our focus is on developing, testing, and evaluating messages in a new major public education program aimed at the three highest risk groups: 21–34 year-olds; repeat and high blood alcohol content (BAC) offenders; and underage drinkers, including college students. Notable examples are: (1) the fiscal year 1999 five-year campaign, You Drink & Drive. You Lose. program which focuses on re-energizing state and community efforts to deter impaired driving; promoting public information and education; media campaigns; technical program support; new research; and community support; (2) the Drugs, Driving and Youth program, involving judges, prosecutors, and law enforcement, with a new emphasis to include juvenile judges at the community level; and (3) the new fiscal year 2001 initiative, Safe Passages for Youth, targeting teens and youth, using science curriculum, teen courts, peer-to-peer programs, parent and teen outreach, and public service announcements. State and local enforcement agencies will be awarded grants to increase youth compliance with underage drinking, zero tolerance, seat belt use, and speeding/aggressive driving laws.

Innovative research programs are designed to provide direct support in reaching our goals to reduce alcohol-impaired casualties. When the National Advanced Driving Simulator (NADS) becomes operational this summer, we will for the first time, be able to replicate and study the relationship between BAC and the likelihood of

crash involvement under demanding driving conditions without putting drivers at undue risk. The results of these studies will have a profound effect in promoting alcohol and drug safety initiatives, including supporting research findings to strengthen drunk driving legislation and providing compelling educational materials to youth groups.

Our strong support of the Presidential Initiative for Making .08 BAC the National Legal Limit continues, substantiated by studies clearly showing that virtually all drivers are impaired at .08 BAC in such critical driving tasks as braking, steering, inattention, and judgment. Moreover, the risk of being involved in a single vehicle crash increases substantially at the .08 BAC level. The startling findings of one study show this risk is 11 times greater for a driver at the .08 BAC level than for a driver who is sober.

SPEED AND AGGRESSIVE DRIVING

NHTSA is responding to increasing public demand for measures to deter aggressive driving. Judges, prosecutors, attorneys, and law enforcement officers have joined with us to develop a National Action Plan on enforcement strategies, prosecutorial options, and sentencing considerations. Several projects using advanced technologies are underway. The new fiscal year 2001 initiative, Safe Roads America: An Initiative to Reduce High Risk and Aggressive Driving, is part of a ONE DOT intermodal initiative that provides statewide enforcement demonstration grants that target selected high risk driving behaviors, such as unsafe lane changes, red light running, unsafe railroad crossings, and passing school buses. This initiative will be combined with a high profile media and educational campaign, focusing on high crash risk behavior.

AIR BAG INITIATIVES

Since 1986, air bags have saved over 5,000 lives. To meet increasing highway safety challenges, we are committed to improving air bag safety as part of a strong occupant protection program. Air bag issues have crosscutting program implications throughout the agency. As a means to improve air bag effectiveness and safety, we are working toward issuing a final rule on air bag safety by March 1, 2000, the date specified by TEA–21. In response to public concerns, our staff is compiling information received through the Rulemaking process and has met with consumer protection and various traffic safety interest groups, including those from the insurance, automobile, and air bag manufacturing industries, to gain their perspective on this critical safety issue. We have also conducted nearly fifty crash tests of passenger vehicles at our Vehicle Research and Test Center, to research air bag safety issues. The goal of the process is to enhance the benefits and minimize the risks of air bags. In support of air bag initiatives, we will be purchasing a new family of adult and child crash test dummies for use in Vehicle Safety Compliance testing for the enhanced dynamic performance requirements of advanced air bags. These dummies will be used for applying the new injury criteria for occupant protection and developing compliance test procedures.

NHTSA's research program is investing in innovative advanced air bag safety research. The Crashworthiness Safety Systems program will use EDR research to collect air bag deployment data from crash sensing and recording devices installed in crashed vehicles. Likewise, we will conduct research on adaptive air bags and sensing devices that could be used to provide pre-crash information to tailor the inflation level of air bags to provide optimal protection. The Special Crash Investigations program will investigate the performance of new air bag systems as they emerge in crashes. Our National Transportation Biomechanics Research Center is involved in research to address pediatric and small female injury criteria associated with interaction of air bags with out of position occupants, and is accelerating its efforts to understand complex injuries resulting from multi-directional air bag deployment. The National Automotive Sampling System (NASS) is investing in new initiatives which will include data collection on side and frontal advanced air bag performance and automatic air bag shut off systems, providing detailed information on real world crashes. In addition, we are developing expanded programs on air bag education to promote awareness of air bag issues. As with all other aspects of motor vehicle manufacturing, design and performance, the agency will continue to aggressively pursue enforcement actions against those manufacturers whose air bags do not conform to the agency's safety standards or contain a safety-related defect.

SEAT BELTS

This year, 33 states, the District of Columbia, and Puerto Rico qualified for a share of $54.6 million in incentive grants for increased levels of seat belt use. Much

of the credit for these successes is due to our Buckle-Up America Campaign, an inter-modal undertaking supporting the Presidential Initiative for Increasing Safety Belt Use Nationwide. Emphasis is on enhanced public education programs; high visibility enforcement; building public partnerships; and encouraging states to enact strong occupant protection legislation. We are increasing national support through such programs as the Operation ABC Mobilization: America Buckles-up Children and our partnership with the Air Bag and Seat Belt Safety Campaign.

In support of these programs, NASS is launching a three-year child safety seat study initiative to develop new estimates of the real world effectiveness of child safety seats in reducing and preventing child injuries in crashes. Researchers will monitor police and other emergency frequencies to allow them immediate response to the crash and the opportunity for gathering the highly perishable data on-scene. In addition, our Crashworthiness program is investigating occupant compartment safety improvements, including inflatable seat belt systems, and the National Transportation Biomechanics Research Center is proposing new initiatives for investigating the redesign of restraints to more realistically accommodate the needs of elderly drivers and passengers.

TARGET POPULATIONS

A fiscal year 2001 comprehensive Target Populations initiative will be implemented to develop innovative, culturally and linguistically appropriate materials; conduct culturally relevant media campaigns on occupant safety and impaired driving, and enlist national minority and rural organization partnerships. Our fiscal year 2001 program will continue to focus on those hard to reach African American and Hispanic populations. The program will develop additional creative approaches to include Native American, Asian-Pacific Islanders, and rural populations. Creative approaches to supporting the Secretary's diversity program are expected to bolster data collection, research, and evaluation to determine the reasons for, and develop and evaluate innovative methods to combat the over representation of minority groups in traffic crashes and its casualties. Supporting this initiative, the President has directed special funding toward developing, improving, and implementing traffic safety programs in Indian Country.

CRASHWORTHINESS

We are initiating efforts to improve occupant protection through using advanced vehicle technology to improve vehicle compatibility and develop crash testing methodologies. These efforts will focus on ways to enhance occupant protection through providing vehicle structure and interior compartment design improvements, combined with improved occupant restraint systems. Obtaining the desired results requires research and analysis of real world crash experience; development of crash test procedures that reproduce the crash event; evaluation of the likelihood of injury from crash test measurements; development and evaluation of vehicle countermeasures and their costs; and estimates of safety benefits achieved. The program is actively seeking methods for international harmonization in frontal offset and side impact crashes, vehicle compatibility, intelligent technologies, biomechanics and pedestrian research. Combining research efforts on advanced restraint systems with research on pre-crash radar and other sensing technologies to determine crash severities could be used to tailor air bag deployment to safely cushion vehicle occupants in crashes.

Advanced technology research will be conducted on deployable energy absorbing structures; changing geometries of light trucks and vans (LTVs) through dynamic suspension systems to lower ride height; and advanced materials to minimize weight difference between LTVs and passenger cars. While this research is proceeding, we will continue to conduct extensive compliance testing to assure compliance of existing vehicles with our crashworthiness standards.

NATIONAL TRANSPORTATION BIOMECHANICS RESEARCH CENTER

The National Transportation Biomechanics Research Center continues innovative crash test dummy research development activities. These activities will provide enhanced test devices and support efforts to develop dummies for regulatory purposes. Specific emphasis is on expanding and extending the technology developed for the advanced frontal 50th percentile male dummy to sizes from the 12-month-old child through the 3- and 6-year-old child, to the 5th percentile female and 95th percentile male, to support our crashworthiness programs. We will continue our efforts to simulate the human as realistically as possible in the automotive crash environment in order to mathematically predict occupant-vehicle interaction and the resulting injuries, and how to reduce that potential with automotive restraints and structures.

Study emphasis is placed on high risk anatomy such as the skull, brain, neck, chest, and legs. We plan to actively participate in the International Harmonized Research Agenda efforts to generalize global understanding of biomechanics and to seek a unified technical opinion on dummy technology and crash injury measures and associated injury risk. NHTSA continues to promote university-based impact injury research involving the combined talents of physicians, engineers, and anatomists to develop definitive injury criteria for major body regions that are vulnerable to crashes. We are expanding our Crash Injury Research and Engineering Network (CIREN) to eight trauma centers and are continuing hospital-based, multi-disciplinary, crash injury studies that identify and analyze critical safety issues and accelerate identification of emerging crash safety issues. Additionally, we support efforts to develop and enhance understanding of complex injury mechanisms associated with air bag deployments and the technologies to improve them.

Special emphasis will be placed on crash protection for the elderly. The need for this research has been reinforced by findings from the CIREN program, indicating that crash injuries sustained by the elderly are more severe, lead more often to long hospital stays, and result in higher mortality rates than identical injuries sustained by younger crash victims. Injury threshold levels for protection of various body parts will be developed, and measures to achieve crash protection for those levels will be developed and evaluated, using advanced dummy test devices. This research will allow designers to create restraint systems that distribute loading in ways that enhance safety. The proposed comprehensive research initiative will also result in augmenting biomechanical knowledge of all sizes of the human body.

NATIONAL CENTER FOR STATISTICS AND ANALYSIS

In fiscal year 2001, the National Center for Statistics and Analysis will expand its special crash investigations, especially those involving air bag-related child and adult fatalities. NASS will undertake new initiatives to increase crash investigations of vehicles that incorporate side and frontal advanced air bags, advanced sensing systems, automatic air bag shut-off systems, and automatic crash data collection systems. Research will include light truck aggressivity studies; a 3-year, on-scene, child safety seat study; and new field data collection technologies. We will decrease the time lapse between case investigation and public availability of data. Moreover, we propose to increase crash investigation data quality and completeness, promote improved collection and use of data from on-board crash event data recorders, and continue planning, researching, developing, and testing of new field data collection technology. Data are integral to state and local efforts in improving highway traffic safety. We will continue to expand, obtain, document, and make state crash data files available for analysis. The Fatality Analysis Reporting System (FARS) will broaden information availability through electronic media such as the Internet and CD ROM; link the FARS data with other national data bases and with state data files; and establish electronic links between FARS analysts and their sources, such as hospitals, coroners, medical examiners, and police jurisdictions, to increase the quantity and enhance the quality of drug and alcohol-related information.

NATIONAL ADVANCED DRIVING SIMULATOR (NADS)

The National Advanced Driving Simulator (NADS) is a world-class driving research tool that will provide a safe method for conducting research on driver performance and behavior during precrash events. It allows safe development of effective countermeasures to driver error. NADS is scheduled to be operational this summer. This technology will provide us with a real world view of driving, including driver response in normal and emergency situations, and it will provide essential information on driver reaction and error in driving situations, alcohol- and drug-influenced driving behavior, effects of aging on driving capability, and how roadway designs affect driver performance.

NEW CAR ASSESSMENT PROGRAM (NCAP)

The New Car Assessment Program (NCAP) is dedicated to providing new car buyers with crash test information in an easily understandable format. NHTSA is expanding this program to give the public more meaningful and accessible information on vehicle safety. These initiatives not only involve determining how well a vehicle performs to avoid crashes, but also its performance during a crash. Our plan is to test enough vehicles to be able to provide frontal and side impact information on 80–90 percent of new vehicles. We will also conduct approximately 10–15 tests with the small stature dummy in the driver and passenger seating positions to assess the safety potential of vehicles for the small stature segment of the population. These results will be used to provide information to small stature adults who are at great-

er risk in high speed frontal crashes. To provide more information to consumers to help make informed purchasing decisions, we will also provide stopping distance and headlighting information on an array of NCAP vehicles.

SAFE/LIVABLE COMMUNITIES

The Safe/Livable Communities initiative seeks to improve the quality of community life through integrating enhanced safety, mobility, and access to services into the transportation programs of all modes. Currently, 11 community outreach forums are being conducted across the country. As a follow-up to these Forums, and building upon our experience with over 750 existing community programs, this new initiative will provide coordinated multi-modal technical assistance and materials. NHTSA will catalog all multi-agency community-based initiatives; provide community-based training programs; develop and distribute ONE DOT materials; and expand partnerships to include non-traditional, multi-cultural partners. It will provide the Department with a single-point coordinator for meeting its safety, mobility, and environmental performance goals, including reducing highway-related fatalities; reducing the rate of rail-grade crossing crashes and railway trespass-related injuries; enhancing boat safety; protecting vulnerable groups, such as the disabled, the elderly, and children; reducing traffic congestion; and increasing transit, pedestrian, and bicycle travel.

SAFE MOBILITY FOR AN AGING AMERICA

This is a new research and educational program that directly addresses the nation's rapidly changing driver demographics. It examines an aging driver population; conducts research into crashes involving older drivers; and develops and tests an older driver communications strategy through campaign materials and training. The program focuses on the significant knowledge gaps in developing strategies for creating and providing educational materials. This is a ONE DOT effort, with NHTSA collaborating with FHWA in developing electronically-based training courses for engineers to implement roadway designs that will accommodate older driver's needs. The program will concentrate on researching licensing and regulatory actions, assessment tools, effects and limits of rehabilitation programs, the impact of specific age-related diseases, existing geometric design guidelines, and crash protection for the elderly.

HIGHWAY TRAFFIC SAFETY GRANTS

The Highway Traffic Safety Grants program includes Section 402 State and Community Grants to support performance-based highway safety programs in every state, territory, and the Indian Nations for the purpose of reducing highway crashes, deaths, and injuries. The program supports national priority programs such as encouraging proper use of occupant protection devices, reducing alcohol and drug-impaired driving, reducing motorcycle crashes, and improving emergency medical services and trauma care systems. This program is a major influence in meeting the Secretary's goals of 90 percent safety belt use by 2005 and reducing alcohol-related fatalities to 11,000 by 2005, as well as reducing traffic fatalities and injuries. The Section 405 Occupant Protection and Incentive Grant Program provides grants that will encourage states to pass stronger laws and implement effective measures to increase safety belt and child safety seat use. The Section 2003 (b) Child Passenger Protection Education Grant Program encourages states to implement child passenger protection programs designed to prevent deaths and injuries to children, educate the public and train safety professionals on the proper use of child restraints. The Section 410 Alcohol-Impaired Driving Countermeasures Incentive Grant Program encourages states to pass stronger laws and implement effective measures to reduce safety problems stemming from driving while impaired by alcohol. This supports the Secretary's Partners In Progress Initiative to reduce alcohol-impaired driving fatalities to 11,000 by the year 2005. The Section 411 State Highway Safety Data Improvement Incentive Grant Program encourages states to implement effective programs to improve state data that is needed to identify priorities for national, state, and local highway safety programs, including a traffic records coordinating committee and a strategic plan.

CONCLUSION

Mr. Chairman, we are optimistic about the future impact of our programs, and the dedicated partnerships we have made in promoting safety for all who travel on the nation's highways. Our fiscal year 2001 program reflects our commitment to cre-

ative and innovative strategies for reducing the tragic toll of highway crashes and their related social and economic costs.

STATEMENT OF KELLEY S. COYNER

Senator SHELBY. Ms. Coyner.

Ms. COYNER. Thank you, Chairman Shelby, Senator Lautenberg, and Senator Murray, for the opportunity to appear before your committee to address our key commitment: safety. My name is Kelley Coyner. I am the Administrator of the Research and Special Programs Administration.

RSPA is requesting $99 million in fiscal year 2001 for our programs which have the key objective of preventing harm to human life and the environment. These activities focus on three principal areas: pipeline safety, hazardous materials safety, and research and technology programs.

We were reminded in the past year of the importance of pipeline safety when a pipeline explosion in Bellingham, Washington resulted in the deaths of three children and changed that small community forever. This incident has given added emphasis to our efforts to create and enforce regulations, to secure the safe operation of pipelines, with a particular emphasis on the four major causes of pipeline failure. We are actively addressing each of these causes: outside force damage, corrosion, human error, and material defects. We have requested a total of $47 million, more than a 28-percent increase over this year's level for pipeline safety.

In particular, we have requested $5 million, the amount authorized by Congress in TEA–21, for damage prevention grants. Outside force damage continues to be the leading cause of disruption to pipelines and other underground utilities.

We have a research effort underway to improve internal inspection technology to locate existing mechanical damage and detect this damage as it occurs.

Another leading cause of pipeline failure is corrosion. We have a rulemaking designed to make our current regulations clearer and more effective. Over the course of the next several months, we will publish proposed regulations to strengthen these standards, and we will also require periodic testing of these lines.

To address human error, another cause of pipeline failure, we have begun working with operators individually and in workshops to implement our new operator qualification rule, and we are checking on their progress through our standard inspections.

Finally, to address material defects, we have a research effort underway to analyze plastic pipe performance and the adequacy of our regulations in this area.

For fiscal year 2001, we are also requesting $23.6 million for pipeline safety grants. This funding is necessary to strengthen our State partners' abilities to carry out their responsibilities to the fullest and to meet the increasing demand for inspection activities and to improve our research and development efforts.

In the United States, more than 3 billion tons of regulated hazardous materials are transported each year, and over 800,000 shipments of hazardous materials are handled daily, a dramatic increase over past levels of transportation in the hazardous materials area.

In order to improve safety and better protect people and the environment, RSPA has published a rule to revise the registration fee structure to support the hazardous materials emergency preparedness grants program. State and local governments use these grants to conduct emergency response planning and training activities to protect communities in the event of a hazardous materials incident. This increased funding, supplied by the registration fee structure, will ensure that a larger segment of the response community will receive critical initial and recurrent training at all levels and will enable them to more effectively protect people and property that could be endangered by accidents involving hazardous materials.

In addition to the pipeline safety programs and the hazardous materials programs, our research and technology program is important to safety as well. This year the Department has requested $3 million in its budget to allow RSPA to begin a DOT-wide initiative that will allow all modes of transportation to better combat human error caused by fatigue. The goal of this effort will develop the knowledge base, strategy, tools and technologies to forecast and detect fatigue-compromised operators and to proactively manage fatigue. Our goal is to restore alertness and safety and to train operators to recognize and respond to potential hazards in this area.

PREPARED STATEMENT

President Clinton and Secretary Slater have made transportation safety their highest priority, and RSPA is committed to protecting and increasing the safety of people and the environment in relation to our areas of responsibility. By working together with State partners, industry, local communities, emergency responders, and the technology community, we can continue to make our Nation's communities safe and liveable.

Thank you, and I would be pleased to answer any questions you may have.

Senator SHELBY. Thank you.

[The statement follows:]

PREPARED STATEMENT OF KELLEY S. COYNER

Good morning Mr. Chairman and members of the subcommittee. My name is Kelley Coyner, and I am the Administrator for the Research and Special Programs Administration (RSPA). I appreciate the opportunity to speak to the Subcommittee on our efforts to address our number one-priority—safety.

To support our enhanced programs and new initiatives RSPA is requesting $99 million in fiscal year 2001, an increase of $16 million over fiscal year 2000. These investments are necessary to protect lives, to create a well-educated population and workforce, and to strengthen partnerships among government, industry and academia to meet our challenges today and our goals for the future.

As communities have expanded and populations have grown, so has the risk of transportation-related incidents. To combat this risk, last year, the Vice President launched a new effort to make communities more livable. We have been especially challenged with keeping our communities and families safe from the unintentional release of hazardous materials from pipelines and other modes of transportation and directing the safe transportation of relief efforts into areas struck by natural disasters.

PIPELINE SAFETY

The challenge of maintaining the safety of pipelines grows each day as our nation's economic prosperity increases and an increase in new construction in our communities brings pipelines and people closer together. There are four major causes of pipeline failure, and we are actively are addressing each of them: (1) outside force

damage, (2) corrosion, (3) human error, and (4) material defects. We have underway important initiatives to protect people and the environment and, in the event of a failure, accelerate response to minimize damage. We have requested a total of $47 million, more than 28 percent above this year's level, for the pipeline safety program.

OUTSIDE FORCE DAMAGE

Most American's homes are connected to the vast underground web of pipes and wires. State-based one-call systems, which enable contractors to obtain information about where pipelines exist and avoid them while digging or excavating, have been effective in avoiding outside force damage. However, this damage continues to be the leading cause of disruption of pipelines and other underground utilities.

The Secretary has challenged RSPA, the private sector and local communities to collectively reduce excavation-related pipeline incidents by 25 percent over the next three years. To reach this goal, we have received $1 million in fiscal year 2000 and requested $5 million in fiscal year 2001, the amount authorized by Congress in the Transportation Equity Act of the 21st Century (TEA–21), for damage prevention grants. We have a research effort underway to improve internal pipeline inspection technology to locate existing mechanical damage and to detect this damage as it occurs. We also are requiring pipeline companies to have public education programs in place to ensure that people are aware of the pipelines in their communities and have information about pipeline companies' safety records. We also are identifying what should be included in these communications plans and assessing their effectiveness.

PREVENTING CORROSION

The other leading cause of pipeline failure is corrosion. While statistical analyses indicate the rate of incidents may be beginning to decline, we think the record warrants attention and indicates reasons to improve our corrosion control standards. We are especially interested in evaluating the best long-term corrosion control measures to determine if there are better means of further reducing corrosion. We have begun a rulemaking designed to make our current regulations clearer, more effective, and compatible with new technology.

ADDRESSING HUMAN ERROR

A qualified workforce will help reduce the likelihood and consequence of incidents caused by human error—another important and preventable cause of pipeline failure. Last year we published a comprehensive rule requiring pipeline operators to develop and maintain a written qualification program that assesses the ability of each worker. We have begun working with operators individually and in workshops to implement our new operator qualification rule, and we are checking on their progress during our standard inspections.

Considering material defects

The last of the four leading causes of pipeline failure is material defects. We plan to continue to investigate pipe strength for opportunities to learn and improve in this area. On gas distribution systems, we will focus on the strength of the plastic pipe, which could be susceptible to fractures as it ages. We have a research effort underway to analyze plastic pipe performance and the adequacy of our regulations in this area.

State safety grants

We oversee and share responsibility with state governments to protect more than 2 million miles of pipelines. For fiscal year 2001 we are requesting $17.6 million for State Safety Grants. This $4.5 million increase over fiscal year 2000, is necessary to strengthen our state pipeline safety partner's abilities to fully carry out their responsibilities to meet the increasing demands for inspection activities. This amount does not include $5 million for damage prevention grants.

More than 75 percent of incidents involving fatalities occur in densely populated areas on intrastate distribution pipelines. Because of this, the oversight activities at the state level have become of critical importance. To assist states we are requesting a 50 percent increase in funding to provide for additional inspection activities. We support the states through a wide variety of actions such as pipeline safety grants, regulatory training, and funding to facilitate their participation in RSPA initiatives.

We have taken aggressive strides to address the causes of pipeline failure through regulatory action, investigation of new technology, and improved state programs. We have forged partnerships with local, state and federal agencies, public interest and environmental organizations to help share responsibility for pipeline safety. By working together, we can make it easier for people to live safely with the pipelines in their communities.

HAZARDOUS MATERIALS

In the United States, more than 3 billion tons of regulated hazardous materials are transported each year, and over 800,000 shipments of hazardous materials are handled daily. RSPA's Office of Hazardous Materials Safety has built a hazardous materials safety program that protects the public through strong safety standards, ensures that people know how to comply with those standards, and responds through strong enforcement to curtail illegal shipments and activities. In order to improve safety and better protect people and the environment, RSPA is committed to working with all segments of the hazardous materials community, including state and local officials and the public.

To do this, RSPA has published a rule to revise the registration program fee structure to support the Hazardous Materials Emergency Preparedness grants program. State and local governments use these grants to enhance emergency response planning and training activities to protect communities in the event of a hazardous materials incident.

The increased funding supplied by the registration program fee structure will ensure that a larger segment of the response community will receive critical initial and recurrent training at all levels and will enable them to more effectively protect people and property that could be endangered by accidents involving hazardous materials.

RESEARCH—HUMAN ERROR: FATIGUE

The Department has requested $3 million in its fiscal year 2001 budget to provide continuing support of a One DOT initiative that will allow all modes of transportation to address two critical areas to combat human error. The first is to focus on developing and implementing technologies and methods for Operator Fatigue Management (OFM). The second is to develop and implement Advanced Instructional Technology (AIT) for operators with a special focus on recognizing and responding to imminent crash threats. This new DOT initiative will develop the knowledge base, strategies, tools and technologies to forecast and detect fatigue-compromised operators and to proactively manage fatigue to restore alertness and safety and train operators to recognize and respond to potential incidents.

CONCLUSION

President Clinton's and Secretary Slater's highest transportation priority is safety, and RSPA is committed to protecting and increasing the safety of people, property and the environment with regard to transportation. By working together with our state partners, our stakeholders, and local communities, we can continue to make our nation's communities safe and livable.

Thank you, and I am pleased to answer any questions you might have.

STATEMENT OF JOLENE M. MOLITORIS

Senator SHELBY. Ms. Molitoris.

Ms. MOLITORIS. Thank you, Mr. Chairman, Senator Murray.

I am very pleased to be here this morning, Mr. Chairman, because your support of our budgets in the past has contributed to an increase in rail safety that is really unprecedented. We can continue to increase the saving of lives and reducing of injuries with your support.

SAFETY STATISTICS

If you look at the chart, you will see the numbers really speak for themselves. Since 1993, injuries and deaths of employees have been reduced 43 percent. The train accident rate is down 9 percent; crossing collisions are down 27 percent; fatalities are down 34 per-

cent; injuries are down 22 percent. These are dramatic, and have occurred while ton-miles are up 17 percent during the same period.

The real reason that this has happened is because people have been working together in partnerships in new ways with Operation Lifesaver, with rail labor and management and many other groups. It is the partnerships that are making it work. But if we have one death or one injury, it is too much, and so we have much more to do.

Our written statement gives you a lot of information about many of our safety programs, positive train control, fatigue mitigation, train switching accidents—which actually account for 45 percent of the fatalities of employees—many, many rulemakings, and our effort to enhance the safety culture on railroads.

Today I am going to focus on crossing safety and other safety initiatives, grade crossing and trespasser issues in particular.

In 1999, crossing collisions and fatalities went down by 7 percent and trespasser fatalities went down by 14 percent. These preventable tragedies still represent 96 percent of the fatalities in the railroad industry. Overall, between 1993 and 1999, the reduction has been 30 percent, significant but just not enough.

GRADE CROSSING SAFETY MANAGERS

One of the things that this committee did in approving our budget some years ago was to establish grade crossing safety managers, which has been tremendously effective. For example, in the 5-year period after their establishment, fatalities decreased 31 percent at grade crossings. So, their work is a very, very important threshold and it is very good. They focus on engineering, enforcement, and awareness programs. Our big partners in awareness and education are Operation Lifesaver and the railroads themselves.

OPERATION LIFESAVER

A few of the highlights of our work with Operation Lifesaver might be interesting to you. For example, next month FRA will be releasing a videotape to truckers focusing on crossings and what they need to do to maintain their own safety and the safety of others.

Senator Murray, in partnership with Washington State Operation Lifesaver and Operation Lifesaver, Inc., FRA developed a law enforcement roll call video to encourage enforcement of State laws on crossings, and 1,000 of these have been distributed to enforcement agencies.

In the West, we partnered with Operation Lifesaver committees from Arizona, New Mexico, and Utah to develop crossing protection prevention programs with Native American communities.

Just this past winter in Pennsylvania, at the Pennsylvania Farm Show, FRA unveiled a field-to-field grade crossing safety program focused on farm crossings. These private crossings can be very dangerous.

We worked very hard with NHTSA, the Federal Highway Administration, and Operation Lifesaver on 70,000 trucker alerts. New public service announcements also will be aired this spring. We have reached about 3 million people directly through our media

advisories, including 60,000 school bus drivers and our PSA's are heard by millions. But there is much more to do.

LOCOMOTIVE HORN RULING

One more very highly visible event occurred recently. FRA, at the mandate of Congress, released a proposed rule on the sounding of horns at crossings. We think this rule can be a win-win rule because it can increase safety, and still provide ways to maintain quiet zones that many communities want. FRA is holding eight public hearings around the country and a long comment period which will end May 26. So, we think it is an opportunity for the citizens to get the answers that they need.

It was interesting, because I had an opportunity recently to speak at the National Conference of Mayors. The mayors are really worried about this, and I am sure you have had a lot of discussion even in your area. We were able to explain what the rule says, let them know it is not going to happen overnight, and let them know we are going to work with them to find the funding in existing sources, and to help them get the job done.

That sums up what we do. Safety is our first and most important job.

PREPARED STATEMENT

I appreciate the opportunity to discuss these things today and to answer your further questions and these of the committee.

[The statement follows:]

PREPARED STATEMENT OF JOLENE M. MOLITORIS

Mr. Chairman and Members of the Committee, I am pleased to appear before you today with my Department of Transportation (DOT) colleagues to discuss surface transportation safety programs, starting with our primary responsibility for railroad safety. During the past seven years, we have participated in an evolution in railroad safety that is unprecedented in the history of this industry. Last month, President Clinton said that the State of the Union is the best in history. In a similar vein, I can say that this industry has a safety achievement record that is better than ever before. This achievement can be credited to the formation of partnerships within DOT, between the Federal and State governments, and between FRA and stakeholders within the railroad industry, such as labor organizations, railroads, and suppliers.

For example, from 1993 to October of last year, rail-related fatality rate was down 38 percent, and injury rates declined 49 percent. The train-related accident rate is down 11 percent for the same period of time. Highway-rail crossing incidents were down 37 percent from 1993—a dramatic improvement. Yet, we know we can do much better, working toward our ultimate goal of zero fatalities and zero injuries. With continued participation from all of our partners and the continued support of the Congress, we will continue to make measurable progress toward reaching our goal. (Attached to this presentation is a table showing our future goals under the Government Performance and Results Act of 1993.)

We believe that continued strong investment in our safety programs can produce even more dramatic results. The President's Budget for fiscal year 2001 requests $103 million for safety and operations, up more than 9 percent from the fiscal year 2000. This funding will support ten additional safety-field positions, outreach programs for grade crossing and fatigue countermeasures, program evaluations on Safety projects and other projects that will enhance Safety regulatory and enforcement work and the collection and dissemination of Safety data. We have also requested 19 percent increase in research and development (to $27 million), 95 percent of which is directed at improvements in safety.

Major priorities for FRA over the balance of this year and next include—

—Working with Operation Lifesaver, Inc. to launch a new crossing safety public awareness campaign;

—Finalizing and implementing a Trespass Prevention Action Plan;
—Completing the locomotive horn rulemaking;
—Finalizing the Freight Power Brake rule;
—Hastening the implementation of Positive Train Control Systems by issuing flexible performance standards for new technology and by advancing the National Joint PTC Program; and
—Working with railroads and employee organizations, through the Safety Assurance and Compliance Program on each railroad, to implement system-wide safety procedures that will prevent employee fatalities involved in switching operations.

GRADE CROSSING SAFETY AND TRESPASS PREVENTION

In recent years, approximately 95 percent of all rail-related fatalities have resulted from highway-rail grade crossing collisions and illegal trespassing. So I want to open this morning by providing you with an overview of the ongoing education, engineering and enforcement activities the Federal Railroad Administration (FRA) is undertaking to improve crossing safety, working in concert with other DOT agencies, States, local communities, and the private sector. This work goes hand-in-glove with our efforts to prevent trespassing on railroad rights-of-way. (Attached is a table showing the status of each of the initiatives under DOT's 1994 multi-modal Rail-Highway Crossing Safety Action Plan.)

Education and Awareness.—In order to drive down risk at crossings, we must raise awareness of that risk among drivers and pedestrians. FRA is a founding sponsor of Operation Lifesaver, Inc. (OLI), and we maintain a strong involvement in OLI outreach efforts nationwide. (FRA's budget request for fiscal year 2001 includes $600,000 for OLI.)

Early in this Administration, we recognized that the traditional, targeted outreach that Operation Lifesaver had made so effective needed to be supplemented through the mass media. FRA's "Always Expect A Train" public education campaign has sought to raise awareness about the deadly consequences of trying to beat a train to a crossing or trespassing on railroad property. This campaign reached citizens in all 50 States via more than 270 television and cable markets, 673 radio markets and 200 publications. Recognizing the merits of mass media strategies, OLI reinforced this message with a hard-hitting series of messages under the theme "Highways or Dieways."

FRA and OLI recognize that these efforts are due for renewal, and we need to ensure that our message is efficiently and effectively delivered. We are currently working closely with Operation Lifesaver to develop new public service announcements which will be introduced this spring. Our budget request includes an additional $500,000 to take this important message into the homes of more Americans through a unified approach.

We must also reach specific audiences that play key roles in crossing safety. In the aftermath of the tragic collision between a school bus and a commuter train at a crossing in Fox River Grove, Illinois in October 1995, FRA, our "ONEDOT" partners, and Operation Lifesaver have developed a school bus driver training education program called The Responsibility is Ours. The program was distributed during 1997 to all State departments of education and transportation. This program is continually monitored and updated. In 1999, FRA developed a School Bus Driver Safety Alert for distribution directly to bus drivers themselves. In the same spirit, working with the Federal Highway Administration (FHWA), we issued a Commercial Truck Driver Safety Alert. Both alerts are available on FRA's website (http://www.fra.dot.gov). We are also working with Operation Lifesaver to develop and distribute in the next few months a video intended to raise awareness about crossing safety within the motor carrier community.

Enforcement.—Crossing safety and the success of passenger and freight rail service are directly related. Collisions at Portage, Indiana and Bourbonnais, Illinois, dramatically brought home the exposure of train crews and passengers to the tragic consequences of train collisions with large motor vehicles. The Department of Transportation is working across a broad front to address this need. For example, the FHWA recently issued a regulation that would penalize commercial drivers who disobey crossing warning devices. Of course, the FHWA rule will be effective only if State and local governments follow through with needed enforcement. That is why FRA is devoting significant resources to elevate crossing enforcement on the agenda of law enforcement agencies through training programs and direct contacts with law enforcement officers.

Engineering.—Since 1974, the "section 130" program has funded safety improvements at highway-rail crossings, including the installation of automated warning de-

vices. This effort has been crucial to our success in reducing crossing deaths. Nevertheless, a majority of crossings continue to have only passive signs such as the basic "crossbuck."

By closing redundant and inherently unsafe crossings, we can reserve section 130 funds for improvements at the crossings that remain. In 1991, FRA established a goal to close 25 percent of the Nation's crossings by 2004. By the end of 1999, a total of 35,123, or 12 percent of all public and private highway-rail grade crossings had been closed by States and localities in cooperation with the railroads. This effort must be continued as we seek corridor-based solutions to the crossing challenge. FRA and FHWA continue to work with State and local community officials to raise awareness that the safest and most efficient way to reduce crossing collisions is to eliminate or consolidate highway-rail crossings. One successful example of this initiative entailed FRA and FHWA partnering with the Western Governors' Association to improve rail safety throughout Western communities by working to eliminate redundant crossings. FRA provided crucial information for development of a reference guide on traffic safety and transportation efficiency that is used by local communities in the western United States.

The future of engineering improvements at highway-rail crossings will be what we make it. DOT agencies sponsored a wide range of demonstration programs during the 1990's indicating that safer crossings can be achieved by using tools that are well proven and currently at our disposal. For instance, the State of North Carolina and the Norfolk Southern Railway, supported by FRA's high-speed rail program funding provided by this Subcommittee, developed the "sealed corridor" initiative to take crossing safety beyond conventional flashing lights and gates. Now is the time to apply lessons learned on a larger scale.

Working with the Office of the Secretary of Transportation, the FHWA, the Federal Transit Administration (FTA), and the National Highway Traffic Safety Administration (NHTSA), FRA has contributed to the establishment of the DOT Leadership Conference Technical Working Group, which now includes participation by the new Motor Carrier Safety Administration (FMCSA). This broad-based intermodal group is examining, from the ground up, what we need to do to take crossing safety to the next level by taking a risk-based approach and using the new tools at our disposal.

Congress has certainly recognized the importance of identifying and prioritizing the risks at grade crossings. Last year, the appropriations committees instructed FRA to identify the ten most hazardous crossings in each state; that project should be completed by this summer. We fully support Congress's intention and believe that risk identification and prioritization should become institutionalized in the crossing safety program. FRA has developed the analytical tools to do the job, but we lack the necessary data collection capacity. A provision in our rail safety bill would remedy that situation by requiring States and railroads to periodically update their grade crossing inventory so that crossing safety funds may be targeted first and foremost at the most dangerous crossings.

Looking ahead still further, FRA has initiated the process of developing standards for Intelligent Transportation Systems (ITS) at grade crossings. Working with the ITS Joint Program Office, we are sponsoring the development of a strategic plan and standards for the ITS Highway-Rail Intersection User Service. Coupled with emerging Positive Train Control Systems, ITS technologies at crossings and in vehicles will one day support dramatic improvements in crossing safety, as well as enhanced traffic management in communities with heavy motor vehicle and train traffic.

Railroad trespassing is especially problematic because too many people do not understand that it is not only dangerous, but illegal since railroad property is private property. Preliminary data indicate that, again in 1999, over 50 percent of all rail-related deaths involved trespassing on railroad property. We know that railroad police cannot deal with this situation on their own. In an effort to increase enforcement of existing laws and encourage adoption of more stringent trespass laws, the FRA developed and disseminated model State trespass and vandalism prevention legislation in 1997 to all 50 governors and State secretaries of transportation, law enforcement agencies and transportation-related associations. Currently, only one State, Iowa, has enacted the model law, but public education efforts promise an increasing awareness of the need for effective enforcement. During the current year, we will work with our DOT partners to finalize a new Trespass Prevention Action Plan. While Federal involvement alone cannot solve this problem, the growing casualties from railroad trespassing will not be reduced if we fail to provide national leadership.

RULEMAKING FOR CROSSING SAFETY

Over the past several years, FRA has put in place requirements for inspection and testing of automated warning devices at crossings and has mandated alerting lights-often called "ditch lights"—to make trains more conspicuous. Within the next few months, we will complete a preliminary cost-benefit analysis and decide whether to propose reflectorization of rail rolling stock to deal with a small, but unusual set of nighttime crashes where motor vehicles actually run into the sides of long trains.

Another significant safety action is our pending proposed rule to require Use of Locomotive Horns at Highway-Rail Crossings. This proposal is mandated by 1994 legislation, which was reconsidered and amended by the Congress in 1996. It is supported by FRA research that shows collisions increase by 62 percent at crossings with flashing lights and gates when train horns are silenced by local "whistle bans." (Very significant effects were also found at crossings with only flashing lights or with only passive signs such as "crossbucks.")

The proposal is controversial due to the potential noise impacts in the more than 275 communities across the Nation that have local whistle bans and because it follows the dictates of the law by placing the burden of implementing alternatives to the locomotive horn on local traffic control authorities or law enforcement authorities. (The law contains no authorization for Federal funding.)

After extensive outreach and study during the period 1995–1999, we have tried to fashion a proposal that provides the most flexible menu of options to communities that wish to establish "quiet zones" by compensating for the loss of the train horn. Presently, our regional grade crossing managers are conducting additional outreach sessions to explain the proposal and encourage comments. There are pages on FRA's web site to provide an in-depth background on this issue. In general, we find that the better the proposal is understood, the more receptive communities are to pursuing a reasoned dialogue on the subject; and we are convinced that we will have a better final rule if we all approach the challenge with that attitude.

FRA will be holding eight public hearings on this proposal, starting with a Washington hearing on March 6. The public comment period will be open through May 26. As this process goes forward, we are committed to working in partnership with communities to advance safety and freedom from excessive train horn noise.

OTHER SAFETY RULEMAKING AND TECHNOLOGY DEVELOPMENT

FRA's rulemaking program and related technology development activities rely heavily on active and broad-based partnerships. It is hard to believe that FRA's Railroad Safety Advisory Committee (RSAC) is less than four years old, given that we have done so much through the collaborative rulemaking process. The RSAC has given us revised Track Safety Standards, Railroad Communications rules, Locomotive Engineer Certification procedures and Steam Locomotive Safety Standards. In addition, Roadway Worker Protection rules, Passenger Equipment Safety Standards, and Passenger Train Emergency Preparedness requirements, were all developed through heavy reliance on a similar collaborative process. I am particularly pleased that our work in support of passenger safety has prompted the American Public Transit Association to develop detailed passenger safety standards to help implement and to complement the Federal rules. FRA will be working with its partners to launch a second phase of passenger rulemaking this year, incorporating the lessons from ongoing research and testing, including results of the full-scale crash testing program that is now underway at the Transportation Technology Center near Pueblo, Colorado.

This past September, the RSAC issued a landmark report, Implementation of Positive Train Control Systems, which points the way toward advances in collision avoidance, speed control and more secure protection of roadway workers. In addition, the North American Joint Positive Train Control (PTC) Project is well underway. The project team has just issued a Request for Proposals for a system developer and integrator with proposals due March 24th. This project must succeed if we are to bring about greater safety improvements in the railroad industry in this new century.

Let's remember that PTC has the potential to greatly increase not only the safety of railroad operations, but service, efficiency and long-term business performance as well. Railroads and their suppliers are working toward more effective traffic planning, but precise and secure execution of those plans will likely require implementation of new train control technology. Moving increasing passenger and freight traffic on the same rail network safely and on time will require train control systems that are highly capable. As the North American PTC project develops the technology, the RSAC PTC Working Group is developing proposed safety standards for train control systems that will be performance-based and flexible.

Meanwhile, FRA is working with the United States Coast Guard, FHWA, and FTA on the deployment of Nationwide Differential GPS. We are requesting $18.7 million through the FHWA research and development account for this program. This highly accurate augmentation to the Global Positioning System will support our PTC initiatives as well as providing greater safety on highways and transit systems. This is part of a comprehensive set of DOT requests in support of modernization and augmentation of GPS, which will improve both the safety and the efficiency of transportation systems.

The Administration directed the DOT to serve as the lead agency within the U.S. Government for all Federal Civil GPS matters. In support of this important role, GPS is ranked as the Department's second most important "Flagship" initiative. We have other important rulemakings still pending before RSAC. We are in the home stretch on proposed rules for an enhanced Locomotive Crashworthiness standard and improved Cab Sanitation. Additional proposals RSAC is working on will address Cab Noise Exposure, Next-Generation Locomotive Event Recorders, and Roadway Maintenance Machines; and we will have a final rule amendment shortly on use of Gage Restraint Measurement Systems to evaluate railroad tie conditions.

Not every cooperative venture has a happy ending, of course. FRA will be issuing a final rule on Freight Power Brakes this year without the benefit of an RSAC consensus, but with a better understanding of the issue than would have been possible without collaboration.

Safety Assurance and Compliance Partnerships

The success of our rulemaking efforts can be attributed to the willingness of the participants to listen to each other, set aside traditional differences, and act in the collective interest of safety.

This same approach is necessary for our other safety work, as well. The Safety Assurance and Compliance Program (SACP) targets the root causes of systemic safety problems, thereby utilizing our limited inspector resources to their greatest advantage. Bringing together labor and management not only enhances communication and helps leverage our compliance resources, but also opens the door to more fundamental changes in the safety culture of the railroads.

Over the past two years, in particular, we have begun to see a thaw in the rigid culture of punitive discipline, mutual distrust and limited communication that stood as a barrier to further safety improvements in the railroad industry. Modest experiments in cooperation have led to bolder action, and new possibilities have emerged, both on individual railroad properties and at the national level.

One of the fruits of this new-found confidence is the report of our joint task force on Switching Operations Fatality Analysis or "SOFA," which was presented by labor, carrier, and FRA representatives at the RSAC meeting of January 28. Railroad classification yards and switching operations are the most deadly working environment for railroad workers. Most of the solutions to this involve common sense, not high technology. The SOFA group has examined the underlying causes of these preventable accidents and has agreed on several steps that employees and railroads can take to reduce this loss of life. We want the railroads to send employees home uninjured each day to their families. When I hear of rail workers being impaled between two cars, I am angry and sad. I don't enjoy writing sympathy letters—they are so dreadfully inadequate. It is also disheartening to me that every death or injury that has occurred during the last 7 years has occurred on my watch. All of us at FRA feel the same sense of loss each time a rail-related casualty occurs.

Last month, I spoke before the North American Rail Alertness Partnership (NARAP). Within the DOT, the Secretary has identified fatigue countermeasures as a ONEDOT Flagship Initiative. The railroad industry is already leading the way for its employees and serves as the model for the other surface transportation modes to follow in this important safety area. Our proposed safety reauthorization legislation would seek to ensure that comprehensive fatigue management plans are in place on every major railroad. Our budget request includes $300,000 to help implement, evaluate and disseminate information concerning fatigue management strategies.

To build on these gains, our safety reauthorization bill seeks Congressional endorsement of this cooperative approach for an improved safety culture in the railroad industry. We request Congressional acknowledgment of efforts in that direction, especially with regard to the use of alternatives to formal discipline in appropriate cases, on certain leading railroads. For those railroad employees who are still not fortunate enough to work in a positive safety culture, our legislation proposes to strengthen existing whistle blower protections in order to deter future discrimination. Enactment of these provisions will foster the trust that has developed and help it grow.

FUTURE CHALLENGES

Light rail.—In past years, it was often possible to establish new light rail service to relieve urban congestion by using abandoned rail rights-of-way. Today, a much leaner and very active freight railroad industry is heavily utilizing its main lines, and still seeking to provide freight service to customers located on secondary lines. The result is heavy pressure for intermingling of light rail and conventional rail service, or for use of existing rail rights-of-way for parallel light rail and conventional rail service. The Transportation Equity Act for the 21st Century (TEA–21) has spawned a significant number of new starts for which shared use of track or construction in a common corridor is attractive or even essential if public transportation needs are to be met at an affordable cost. The FTA and FRA have recognized this issue and have issued a proposed Joint Policy Statement focusing on shared use of track. The most important safety issues related to shared use include: (1) the potential for a catastrophic collision between light rail and conventional equipment; (2) shared use of highway-rail grade crossings and infrastructure and (3) employee safety. The proposed policy seeks to promote time-separated operations, apply FRA regulations only as necessary to address common hazards, and defer to FTA's new State Safety Oversight program with respect to strictly light rail aspects of the operation. Meanwhile, FRA and FTA are coordinating at the regional level to evaluate safety challenges associated with parallel operations in the same corridor, including detection of freight-related hazards and adequate provision for highway-rail crossing safety.

Intermodal safety.—The intermodal dimensions of transportation continue to grow with every passing year. To meet these challenges, FRA works closely with the Research and Special Programs Administration and the U.S. Coast Guard, among other agencies, to ensure that hazardous materials are properly packaged and documented for transportation. Increasingly, we are becoming aware that we can be more effective in addressing public safety needs across a broad front by partnering with NHTSA, the FHWA, FMCSA, FTA, and many industry and advocacy organizations in promoting crossing safety and trespass prevention. FRA's participation in promoting the "Safe Communities," "Buckle-Up America," "Moving Kids Safely," "Garret A. Morgan Transportation Futures Program," "Aggressive Driving Team" and other DOT initiatives gives us access to new audiences while allowing us to contribute to the Department's larger mission. As the past chair of the DOT Safety Council, I am an enthusiastic supporter of "ONEDOT" efforts that seek to instill the message of safety in our communities.

Spent fuel.—To meet the needs of the future, our partnerships will need to be inter- as well as intra-departmental. The Department of Energy (DOE) and the Nuclear Regulatory Commission are anticipating a large increase in the rail transportation of High-level Radioactive Waste (HLRW) and Spent Nuclear Fuel (SNF) to long-term storage facilities. Nearly 90 percent of these shipments are intended to move by rail. Spent nuclear fuel rail shipments have doubled in just the last few years from 20 to 40 shipments per year. This figure will climb to over 400 once long-term or interim nuclear fuel storage sites are established, which could occur in the next several years. To accommodate these important national and international goals, FRA will help ensure the safe transportation of nuclear hazardous materials by positioning specialized teams of inspectors that will oversee every nuclear material train movement from beginning to end and conduct a detailed, comprehensive inspection of the track, signal and grade crossing systems. (Attached to this presentation is a table outlining projected movements of HLRW and SNF.)

During the last decade of the 20th Century, we began to find new ways of achieving progress through partnerships. As we stand at the threshold of a new century, we need continued commitment, courage and hard work from our partners to keep this process moving forward. The only way we can continue this momentum is to continue talking at the table and putting our agreements to work through partnerships within DOT, with States and local communities, and with all parts of the transportation industry. I appreciate very much the support of this Subcommittee for our efforts, and we promise you that we will do everything we can to utilize the resources you provide to FRA to achieve the maximum safety impact.

SAFETY PERFORMANCE GOALS

	Calendar year							
	1998 rate actual	1998 rate actual [1]	1999 rate goal	1999 rate actual [2]	2000 rate goal	2001 rate goal	2002 rate goal	2003 rate goal
Rail-related fatalities rate	2.08	1.48	1.38	1.30	1.30	1.23	1.16	1.10
Rail-related injuries rate	31.14	16.78	14.40	15.99	12.90	11.60	10.40	9.38
Grade crossing accidents rate	3.47	1.98	1.77	2.00	1.57	1.39	1.23	1.09
Train accidents rate (including grade-crossings)	4.25	3.77	3.47	3.79	3.38	3.29	3.21	3.12
Hazardous-materials releases rate	16.70	11.90	11.30	([3])	10.70	10.20	9.64	9.14

[1] 1998 was used as the base year for developing goals for years 1999–2003.
[2] 1999 data are preliminary and cover the period January-October 1999.
[3] Data is not available at this time.

STATUS OF RAIL-HIGHWAY CROSSING SAFETY ACTION PLAN SUPPORT PROPOSALS

The Rail-Highway Crossing Safety Action Plan was issued by the Department of Transportation in June, 1994. The Action Plan contains 55 specific items concerning enforcement, engineering, education, research, promotional and legislative actions that can be taken to improve highway- rail grade crossing safety. The following is an update on each of the 55 items detailed in the Action Plan.

Increased Enforcement of Traffic Laws at Crossings:

1. *Section 402 Funds*.—NHTSA and FHWA continue to promote state funding for targeted public education, and law enforcement initiatives. In fiscal year 1999, 13 states dedicated $523,500 towards these efforts. Status: Ongoing

2. *Law Enforcement Liaison Program*.—The FRA employs a full-time law enforcement liaison (currently the 5th officer to work at the FRA) who conducts extensive outreach activities to both the law enforcement and judicial communities. Regional programs are being established in which eight additional Officers will work part-time with FRA across the nation. In coordination with Operation Lifesaver, FRA has distributed over 1000 copies of a new professional education video entitled "Roll Call" to law enforcement entities across the U.S. Status: Ongoing.

3. *Outreach to Judiciary*.—Articles have been published in the National Traffic Law Center (NTLC) newsletter. Outreach presentation has been made to Traffic Court Judges Seminar. FRA has published and distributed the "Partnering in Safety: Judicial Outreach" brochure. Status: Ongoing

4. *Rules of Evidence*.—TRB researched state laws and published the article, "Photographic Traffic Law Enforcement," in the December 1996 National Cooperative Highway Research Program (NCHRP) Legal Research Digest. Status: Complete.

5. *Commercial Driver's License*.—FHWA and the American Association of Motor Vehicle Administrators (AAMVA) sought to elevate crossing violations to "serious" for commercial drivers license (CDL) holders as required by 1995 legislation. The Final Rule was issued on September 2, 1999. Status: Complete.

6. *Compilation of State Laws and Regulations on Highway-Rail Crossing*.—The second edition (published in August 1995) has been updated and will be published in early 2000. The greatly expanded new edition will be available on the FRA website. Status: In progress.

7. *Safety Inquiry*.—The FRA will hold an informal safety inquiry about standing rail equipment near grade crossings. Inspection, testing and maintenance (ITM) regulations prescribed best practices where signals exist. Status: In progress.

Rail Corridor Crossing Safely Improvement Reviews:

8. *Principal Railroad Lines (PRLs)*.—FRA defined a national system of principal rail lines, developed maps and encouraged reviews of PRLs. Status: Complete.

9. *The National Highway System (NHS)*.—FHWA has encouraged states to include upgrades or elimination of crossings on the NHS in their state planning processes. The OST Strategic Assessment Plan includes "continued safety improvements." Status: Ongoing.

10. *Upgrade Signing and Marking*.—FHWA has sought to improve conspicuity of signs and markings at crossings. FHWA issued a memo in December 1994 to encourage use of higher-quality material. Status: Ongoing.

11. *Responsibilities for Selection and Installation*.—FRA and FHWA have sought to clarify project responsibilities between highway and railroad authorities. Regulatory action was terminated in August 1997. DOT Committee is considering standardized national guidelines. Status: In progress.

12. *STOP Signs*.—FHWA and FRA have sought to promote STOP signs as a traffic control device alternative as detailed in July 1993 memo issued to FRA and FHWA field offices. An NTSB recommendation has been issued. Status: Ongoing.

13. *Incentives for Crossing Consolidation- Cash Payments*.—Under legislation requested by DOT, direct cash payments of STP funds are available to communities for crossing closures. Status: Complete.

14. *Incentives for Crossing Consolidation- Eligibility for 100 Percent Federal Funding*.—Under legislation requested by DOT closure projects are eligible for 100 percent Federal funding. Included in DOT's fiscal year 1997 Appropriations Bill. Status: Complete.

15. *Crossing Consolidation and Closure Case Studies*.—FRA set forth guidelines and strategies based upon case studies in July 1994 publication, "Highway-Rail Grade Crossing. A Guide to Consolidation and Closure." American Association of State Highway Transportation Officials (AASHTO) published a report in March 1995. Status: In progress.

16. *Integrated Intermodal Transportation Planning*.—FRA and FHWA conducted nine outreach meetings with MPO's and railroads (held in TX, CO, PA, MO, MA, WA, CA, GA & IL). Status: Complete.

17. *Check List*.—FHWA and FRA developed a detailed procedure for performing corridor reviews. Provided to FRA and FHWA field offices in May 1995. Status: Complete.

18. *Highway-Rail Crossing Handbook*.—FHWA is updating the 1986 version. Preliminary draft material has been received. Target completion date is September 2000. Status: In progress.

19. *Vegetation Clearance*.—FHWA encourages states to clear vegetation. Status: Ongoing.

20. *Corridor Review Participation*.—DOT proposed to establish an STP incentive program for corridor reviews. DOT bill offered, but was not considered. Status: No further action.

21. *Distribution of Funds*.—FHWA and FRA through the DOT proposed to revise the distribution formula for section 130 funds under NEXTEA. Status: Not considered. No further action.

Increased Public Education and Operation Lifesaver:

22. *Marketing Materials Plan*.—FRA developed the Always Expect A Train public awareness campaign on highway-rail grade crossing safety and railroad trespassing. The multi media campaign was distributed to and disseminated in most media markets across the U.S. FRA is working with Operation Lifesaver to continue the success of the Always Expect A Train campaign by developing new video and audio public service advertisements (PSAs) to be released in May 2000. Status: Ongoing.

23. *Driver Training Materials*.—NHTSA and AAMVA have developed a new model drivers' license manual published with a section on grade crossings. Status: Complete.

24. *National and Community Service*.—FRA sought to support Operation Lifesaver State Coordinators through the Service Trust Act of 1993. Americorps funding was not sufficient to include this program. Status: No further action.

25. *Truck and Bus Involved Accidents-On-Guard Notice*.—FHWA published a notice about highway-rail grade crossing safety in February 1994. Another notice on high profile crossings was issued in February 1996. Status: Complete.

26. *Truck and Bus Involved Accidents-Advisory Bulletin*.—FHWA sent a bulletin to trade press about grade crossing safety in February 1994. Status: Complete.

27. *Truck and Bus Involved Accidents-Public Service Print Advertisements*.—FHWA developed print PSAs and distributed to trade press in January 1994. Status: Complete.

28. *Truck and Bus Involved Accidents-Trucker on the Train*.—FHWA, FRA, ATA and OLI hosted trucking executives on locomotives. Kick-off event was in November 1994. Future joint rail-truck industry meetings and events under consideration. Status: Ongoing.

29. *Truck and Bus Involved Accidents-Operation Lifesaver*.—FHWA has facilitated meetings between Operation Lifesaver and trucking companies. FRA developed and distributed 74,000 copies of its Trucker Safety Alert and 14,000 copies of the School Bus Driver Safety Alert. Both FRA fact sheets are available on the agency's website. Status: Ongoing.

30. *Truck and Bus Involved Accidents-National Safety Organizations*.—FHWA has communicated about grade crossing safety to industry and law enforcement officials. Pamphlets have been published by National Safety Council (NSC) in March 1995 and September 1997. OLI produced training and awareness video in 1996. In July

1999, FRA participated in the Secretary of Transportation's ONEDOT Commercial Motor Vehicle Safety Workshop. Status: Ongoing.

31. *Truck and Bus Involved Accidents-On-Site Compliance Reviews*.—FHWA has reminded motor carriers about the risks at highway-rail crossings during oversight reviews. A December 1994 memo encourages discussion and distribution of materials. Status: Ongoing.

32. *Operation Lifesaver Matching Funds*.—DOT proposed increased funds to Operation Lifesaver with non-public match required. The 1994 DOT bill was not considered. The FRA's fiscal year 2000 grant to OLI totals $950,000, $350,000 of which will be used for the development of new public service advertisements, as directed. In addition, TEA–21 provides $500,000 to OLI annually from FHWA. Status: No further action.

Safely at Private Crossings:

33. *Define Categories*.—FRA is defining categories and minimum standards for private crossings. Statistics and comments from previous safety inquiries are being reviewed. Status: In progress.

34. *Safety Inquiry*.—FRA will hold an informal safety inquiry about standards for certain private crossings. Status: In progress.

35. *Locked gate at Private Crossings*.—FRA and FHWA will jointly demonstrate gates with controlled locks at private highway-rail crossings. Demonstrations are planned in New York and which has received a $275K grant and Oregon which has selected a demonstration site. Status: In progress.

Data and Research:

36. *Research Workshops*.—Volpe held a workshop in April 1995 to discuss current and projected research needs. Report issued. Status: Complete.

37. *Host Research Roundtables/Workshops-Defense Conversion Fair*.—As part of the DOT Technology Fair, the FRA hosted an exchange program to familiarize Defense firms with industry needs. A Broad Area Announcement (BAA) sought proposals. Status: Complete.

38. *Demographics*.—NHTSA published a study of fatal casualty statistics in November 1994. Status: Complete.

39. *Accident Severity*.—NHTSA completed a study on accident severity statistics in February 1995. Unpublished memo report. Status: Complete.

40. *Signs, Signals, Lights and Markings—Signs and Signals*.—FHWA is researching new traffic control and warning devices. Final Report was issued July 1999. Status: Complete.

41. *Signs, Signals, Lights and Markings—Train Horns*.—FRA published a report in April 1995 on the impact of whistle bans nationwide. Analysis of Wayside Horns published in June 1998. NPRM on the Use of Locomotive Horns at Highway-Rail Crossings was issued on January 13, 2000. The comment period for the NPRM and related Draft Environmental Impact Statement (DEIS) closes on May 26, 2000. Status: In progress.

42. *Signs, Signals, Lights and Markings—Light Rail Crossing Gates for Left Turn Lanes*.—FTA is investigating alternatives for left turn lanes with parallel tracks. Los Angeles County Metropolitan Transportation Authority (LACMTA) demonstration of 4 quadrant gates is progressing. Status: In progress. 43. Signs, Signals, Lights and Markings- Locomotive Conspicuity: FRA developed standards and rules for alerting lights on locomotives. Regulations' require that all locomotives be equipped as of December 1997. Status: Complete.

44. *Signs, Signals, Lights and Markings—Manual on Uniform Traffic Control Devices*.—FRA and FTA sought to amend the MUTCD to address such issues as high-speed rail, temporary closure, multi-track signs, and work zones. Notice was published in the Federal Register in June 1995. Proposed amendments were published in the Federal Register on December 21, 1999. Status: In progress.

45. *Innovative Technology—Automated Video Image Analysis*.—FRA is investigating the potential for live video monitoring of crossings. Tests will be conducted in NY and CA. Proposals are being solicited through the Ideas Deserving Exploratory Analysis (IDEA) program. Status: In progress.

46. *Innovative Technology—Radar Activation System*.—FTA sought to evaluate and demonstrate the feasibility of a radar-based system to detect trains and approach speed. Interminable administrative and contract problems delayed demonstration. Status: Terminated initiative. A substitute project is assessing 4-quadrant gates using video on MBTA's new Old Colony Line.

47. *1–800 Computer Answering System*.—All Class I railroad currently have operable 1–800 systems in place. FRA is working with the American Shortline and Regional Railroad Association (ASLRRA) to develop 1–800 emergency notification sys-

tems. Software is being developed for small and medium-sized railroads to enable 1–800 notification and signs are now posted at most crossings with active warning systems. The State of Texas has been provided with software as part of a two state pilot project. Status: In progress.

48. *Light-Rail Accident Statistics*.—FTA is broadened the Safety Management Information System (SAMIS) system to identify crossing accidents. New data was first published in the 1995 SAMIS Annual Report. Process is under review. Status: Ongoing.

49. *Resource Allocation Procedure*.—FRA proposed to recalculate the accident prediction formulas and rebuild the accident prediction model. During peer review of proposed new procedure, it was decided to retain the original. The current formulas are being updated. Status: In progress.

50. *The Highway-Rail Crossing Inventory*.—FRA and FHWA have promoted voluntary updating by states. FHWA issued a memo on the subject. The Update Manual was published in December 1996. The FRA introduced new data and Y2K format in 1998 and has proposed mandatory updating by states and railroads in the Rail Safety Reauthorization Act 1999. Status: In Progress. A safety inquiry about the display of crossing identification numbers will be held in the future.

Trespass Prevention:

51. *Demographic Study*.—FRA is reviewing its trespass fatality statistics to focus on remedial efforts. Zip code maps are available. 1997 and 1998 bulletins include new data. A data workshop was held in April 1998 and in May 2000, FRA, Operation Lifesaver and the Class I railroads have committed to a meeting at which a consensus agreement will be sought over how to create a snap-shot demographic portrait of trespassers. Status: In progress.

52. *Trespasser Casualty Reporting*.—FRA successfully proposed collecting additional data on trespass casualties. New reporting requirement took effect in January 1997. Data is now available on the FRA website. Status: Complete.

53. *Workshop on Trespass Prevention*.—FRA held a National Workshop on Trespass Prevention in November 1995 in Atlanta. Five Regional Workshops were held in 1996. Status: Complete.

54. *Regional Campaigns*.—FRA developed a low-cost Public Service Announcement to increase trespass awareness. Always Expect A Train campaign introduced in Summer 1996. Status: Complete. Ongoing public outreach efforts continue.

55. *Model Trespass Prevention Code*.—FRA developed, and distributed to each state, Model Trespass legislation in April 1997. Status: Complete. Available via the FRA website.

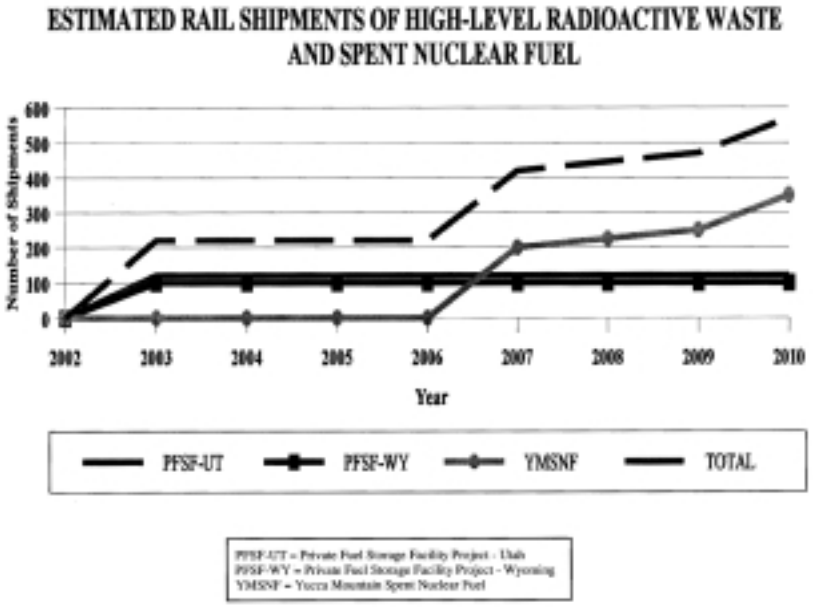
Status Key

Ongoing.—An initiative which has become a routine or continuing effort.

In progress.—An initiative which is still being developed and implemented.

Complete.—An initiative for which a specific action has been taken or a product has been disseminated.

Not Considered/No Further Action.—Insufficient authority or funding to pursue an initiative.



BIOGRAPHICAL SKETCH OF JOLENE M. MOLITORIS

Appointed by President Clinton in April 1993 and confirmed by the Senate, Jolene M. Molitoris is the first woman Administrator of the Federal Railroad Administrator (FRA) in its 34 year history. The FRA is an agency of the U.S. Department of Transportation with responsibility for the safety of all rail freight and passenger service in the United States. During her tenure, Administrator Molitoris has become the champion for rail safety in the U.S. and around the world, establishing zero tolerance for any safety hazard as the industry standard, creating safety partnerships with rail labor and management and achieving historic increases in all safety categories as a result.

Under Molitoris' leadership, the FRA began its transformation from a traditional regulatory agency into a result and customer focused organization. The FRA safety program adopted a systems approach, identifying root causes for safety hazards and system wide solutions that have become "best practices" in the industry. New partnership approaches to "growing" safety and rules development are now institutionalized in the Safety Assurance and Compliance Program (SACP) and the Rail Safety Advisory Committee (RSAC). For the first time, labor, management and other constituents are at the table from the beginning, not at the end of the rulemaking process, resulting in 1998's distinction as the most productive year for significant rulemaking in FRA's history. Most importantly, the period 1993—1999 was the safest seven year period in U.S. railroading history, with a 43 percent reduction in employee injuries and fatalities and 30 percent reductions in grade crossing injury and death. Other safety results include: reductions in complaints to regional offices by as much as 86 percent; use of statistics to spot and stop dangerous trends; and cutting edge initiatives attacking such intrinsic industry issues as fatigue by establishing the North American Rail Alertness Partnership (NARAP).

Amtrak, high speed rail and technology have also been at the forefront of FRA's efforts during Molitoris' tenure. The new high speed trains debuting in 2000 can be called the safest trains in the world because of FRA's specifications. And the first non-electric high speed locomotive, a public/private partnership between FRA and Bombardier, will be demonstrated in the U.S. during 2000. Molitoris' focus on positive train control (PTC) has been the catalyst that has resulted in an industry-wide investment for the first time, with American Association of Railroad members committing over $20.M to a PTC project in Illinois. Also from 1993—1998, FRA re-

sponded to more mega-mergers and acquisitions than ever in history and created a Safety Implementation Plan strategy to assure that safety would not be compromised in the process. Administrator Molitoris is the recipient of many honors. She was the 1989 and 1992 recipient of High Speed Rail/Maglev Association President's Award for Outstanding Achievement. In 1995 Women's Transportation Seminar (WTS), Washington, D.C. Chapter named Molitoris their woman of the year and in 1996 the WTS of the U.S. named her National WTS Woman of the year. Also in 1996, the Cooperstown Conference awarded Administrator Molitoris its Lawmaker/Federal Service Award. In 1999, Administrator Molitoris received three awards: the Indiana High Speed Rail Association created the Jolene M. Molitoris Golden Spike Award; the National Ethnic Coalition of Organizations Foundation, Inc. awarded her the 1999 Ellis Island Medal of Honor; and in its December 1999 publication, Railway Age Magazine named Administrator Molitoris one of the 12 great railroaders of the century.

Administrator Molitoris holds a B.A. from Catholic University of American and a M.A. from Case Western Reserve.

Senator SHELBY. Senator Lautenberg, do you want to start the questions? I know you have got to do some other things

Senator LAUTENBERG. That is very nice, Mr. Chairman. I appreciate it.

I wanted to focus a little bit on the Coast Guard.

Mr. Chairman, I would ask that other questions that I will have for each of the witnesses be submitted in writing and would ask for a prompt response.

Admiral Card, I want to give you an opportunity to comment on my remarks, and you did say that and confirm the readiness question. It is one that has to be focused on and dealt with.

Last year the committee fully funded the budget request for operations, but the Commandant has said publicly the Coast Guard readiness continues its decline: aircraft availability at unacceptable rates and people overworked.

Now, since we did fund the operations request last year, how did we get into this situation?

Admiral CARD. A couple of things I will say, sir. One is that, if you remember also, there was a readiness discussion last year, the Kosovo supplemental, and the Coast Guard identified $200 million for readiness concerns. But most of that was carried forward to this year's budget. So, of that $200 million, we were able to spend $40 million last year, of which $23 million was just paying some medical bills. So, we really were not able to pay attention to some of those things we even focused on last year.

Second, you brought up an issue earlier. We went through, in our great effort to help balance the budget, we streamlined the Coast Guard, doing what we thought was our part, and we probably went too far, took too many people out of our overhead and out of our systems. And what is more, we got below our numbers. We reduced the number of people in the Coast Guard, and we went more than 1,000 people below that. It has taken a lot of effort to get the people back. We will hopefully have it back by the end of the year. It has also taken a lot of money out of other things to be able to put into that work force restoration.

Senator LAUTENBERG. The question about further increases for the drug war effort looms large when our resources to support a fully effective—and I use the word balanced—Coast Guard platform is being ignored. How does that strike you?

Let me not put you on too tough a spot because one of the things that I have seen with the Coast Guard and now in the way you

were almost too responsive because the one thing that I believe happens around this place is that very often there are serious attempts to respond to cutbacks and things of that nature. But the Coast Guard took their mission very seriously, as they do with all of their missions, and I think you depleted your resources to a point where it hurt the operations.

So, how do we justify, if we must, expanded functioning for the drug effort and still take care of our other missions?

Admiral CARD. Senator, this year's budget, the 2001 budget, goes a long way to helping us restore the work force readiness concerns. There is money in there for that. There is money also in there for maintenance.

There is also money in there for the use of force from helicopters, which we think is very important. Right now, that will probably be the biggest single force multiplier that we have in the drug war.

So, we would like to think it is a balanced approach and there is money in there for both things in the 2001 budget. That is why I asked that you would support that. We worked very hard with the Administration, with OMB, to get the monies in there. We think this is a start of being able to do that.

Senator LAUTENBERG. You commented on the fact that the fishing industry is one of the most hazardous occupations that we know, and that is certainly true. The three of us sitting here all come from coastal States, and we know the risks that our fishermen run when they are out there.

How do we maintain our compliance levels for inspection when we are so shorthanded? How about our boardings and things? Can you conduct those with the same staffing that you have got and conduct them as efficiently as you feel is necessary?

Admiral CARD. Sir, there is a modest increase for a number of people to do fishing vessel safety examinations also in the budget. We have recognized the need for that, and we are trying to emphasize more the dockside examinations to get people ready to go to sea from a preventive perspective.

The other thing we have done is by some of the recapitalization with moving the coastal patrol boats further up north, we are not going to be taking those down south as we would the 110-foot patrol boats.

But in all budget requests, it is a balance. And if you are asking me in the process would we do more if we had more, of course, we would. But we understand the balance in this whole process of bringing forth the budget to the Congress.

This past year both Area Commanders have spent particular focus on fishing vessel safety: *SAFE CATCH* on the east coast with Admiral Shkor and *SAFE RETURN* on the west coast with Admiral Collins. We are starting to see some positive returns in those efforts. They do focus on a risk management basis on the most high-risk fishing vessels that we see.

Senator LAUTENBERG. As I see it, you will be able to put on about 24 additional inspectors. Is that going to give you the numbers of people to really improve compliance within the fishing industry?

Admiral CARD. It is a step in the right direction, sir.

Senator LAUTENBERG. If it is a one-step platform that you are reaching for, that is not bad, but if it is a 10- or 20-step rise that you have to hit, why, that does not sound like it is really enough.

I was at the South Pole just a few weeks ago, and I had the opportunity to board the icebreaker and meet the crew and the captain of the ship. I want to tell you that is not easy duty, especially when it takes such a long haul to do. But I thought the spirit and the willingness to just drone on and do a very important job was remarkable. The one thing that we want to make sure of is that they feel like they are getting the resources they need to do the job effectively.

Mr. Chairman, I am going to submit the rest of my questions.

Senator SHELBY. Without objection.

Senator LAUTENBERG. Thank you very much.

Senator SHELBY. Senator Murray?

Senator MURRAY. Thank you very much, Mr. Chairman, for having this very important hearing on safety. I would like to submit my full statement for the record, and just focus on the questions that I have.

PREPARED STATEMENT

Senator SHELBY. Without objection.

[The statement follows:]

PREPARED STATEMENT OF SENATOR PATTY MURRAY

Thank you Mr. Chairman. I would like to start by thanking all of you for coming up to the Hill today to discuss your safety initiatives in the fiscal year 2001 Transportation budget.

As I told Secretary Slater when he came before the subcommittee two weeks ago, I believe this budget is one that I—and the members of this committee—can work with. It continues our common goals of improving safety, mobility, economic growth, and environmental protection.

Safety has always been my number one priority in transportation and I know this administration shares my beliefs. This budget is evidence of that.

It does a great job of helping to make all our modes of transportation safer. NHTSA receives a 36 percent increase in the budget; there are new initiatives about drunk driving; new enforcement tools to help get other dangerous drivers off the road; and strong initiatives for transit and rail safety. FRA receives a 9 percent increase for safety and operations, and the Coast Guard gets $64 million in the President's budget for boat safety. I support all of these initiatives and will fight for these levels of funding.

I am also pleased to see that RSPA gets a $10 million increase from last year's enacted level for the Office of Pipeline Safety to a proposed $47 million. As you well know, pipelines are not as safe as they can be in this nation. It took a accident that killed three young people and caused much environmental damage in my state 8 months ago to bring that fact to light.

At the on-set I would like to point out that transporting hazardous liquids and gas through pipelines is the safest method possible. We won't improve safety by putting more of these products in barges and on trucks. However, many of these pipelines are getting old, and we are starting to see problems with them. Aside from the people in my state—who won't let the pipeline reopen at all without adequate assurances it is safe—there have been recent releases in places like Pennsylvania and Louisiana. In addition, many new pipes are being laid in places like New Jersey, Maine and Montana. We need to ensure the public that these pipelines are as safe as they can be, and we need common sense changes to make sure that happens.

I would also like to start off by thanking Kelly Conner, the Administrator of RSPA, and her staff who have worked very hard to help the people of my state deal with this horrible tragedy. I also want to illustrate my appreciation for all the work she has done to educate me and my staff so we can better understand how pipeline safety is regulated in our country.

As I mentioned two weeks ago in this subcommittee, I've introduced legislation this session that would reauthorize the Office of Pipeline Safety, S. 2004, the Pipeline Safety Act of 2000, and Senator Lautenberg on this subcommittee has agreed to be a co-sponsor. I've been meeting with many of my colleagues on this issue. And for those of my colleagues that I haven't met with yet, I encourage you to look at my bill. It requires periodic inspection, requires individual government certification of pipeline operators, establishes a "public right to know" about problems with pipelines, and invests and encourages R&D so we can better inspect and test these pipelines. My bill also encourages your Department to develop strong and substantive partnerships with states if these state have the ability and resources to regulate pipelines.

My colleagues in the House—led by Representative Jack Metcalf—have introduced a similar bill.

Your "Budget in Brief" says, "RSPA will expand and strengthen its partnership with the states". I think you should be expanding and strengthening these partnerships.

In contrast, I understand that you've informed the states that are currently participating in a joint state/federal pipeline safety program that you intend to phase out state participation.

As you know, my state and others like Virginia are very interested in becoming interstate agents. In fact, the proposed National Governor's Association Policy on Natural Gas Pipeline Safety, ". . . urges Congress to direct OPS to reverse its existing policy of declining to grant any additional state interstate agent status for interstate pipelines.".

I strongly believe that states can be good partners in pipeline safety if they can prove they have the resources and expertise to handle the job.

Would you please elaborate on this statement from your booklet and explain what you mean when you say you want to expand and strengthen partnerships with states? Could you explain in what areas you would be comfortable seeing states have regulatory authority over interstate pipelines if they prove they have the money and expertise to do so?

My second questions involves your rule on the Qualification of Pipeline Personal that became effective on October 26 of last year.

As you know, the NTSB first requested a rule on operator qualification back in 1987. Following some very bad accidents in 1996—one that killed 33 people and injured 69 others—you published a Notice of Proposed Rulemaking (NPRM) to require pipeline operators to develop a written qualification program for individuals operating pipelines.

I am concerned that the rule your agency has implemented does not establish specific training requirements for personnel and allows companies to evaluate an individual's ability to perform tasks using such things as simple oral examinations, with little or no check by your agency as to the adequacy of such procedures.

My question is why don't you think it is feasible to have individual federal certification of operators? It is feasible in the airline industry where the FAA determines the capabilities of individual employees who work on aircraft.

I just have a few more questions.

I know you are issuing a rule for comment next month on the testing of pipelines. I understand this is in lieu of the fact that you've been required since 1996 to implement a rule that would require regular inspection of pipelines in high risk areas.

As you know, my bill and the House bill would require periodic inspections every 5 years. Will your rule require mandatory periodic inspections? If not, what mechanisms will be in place to ensure that we are relying on more than the industry's own self-interest?

My next question concerns inspection technology, something I've learned a lot about in the past few months. I've learned about devices called "smart pigs", which run internally in a pipe to detect anomalies and corrosion. Unfortunately, only about 20 percent of the pipes in this country are equipped to handle these devices and their reliability is often questioned. I've learned about another type of testing—hydrostatic testing—where rushing water down the pipe to find leaks and cracks. But this type of testing can cause long-term damage. Obviously, the current inspection methods are not perfect, and it will take more research to give us the tools to ensure that pipelines are safe. My question is what types of research and development is OPS undertaking to better the level of inspection technologies?

You know I and others are eager to see your pipeline reauthorization bill so we can make progress on this important issue in this short legislative year. So my final question is when do you plan on sending the Administration's pipeline safety reauthorization bill to Congress?

Thank you.

Senator MURRAY. Ms. Coyner in her presentation mentioned an accident on pipelines that occurred in my State last June 10 where a pipeline exploded and three young children were killed. I, like most citizens in the State, really did not pay attention to the pipelines that went under our communities and by our schools and places of work until that occurred. I have spent a great deal of time since then looking at the whole issue surrounding pipeline safety. I want to thank Kelley Coyner and her staff for working with the people in my State as we resolve this problem and helping educate me and my office about how we regulate pipelines.

As a result of what I have learned, I have introduced legislation on the reauthorization of pipeline safety that does a number of things, including requiring periodic inspection, which is not required right now; and requiring individual government certification of pipeline operators, which is not required now; establishing a public right to know so that people who live on or near these pipelines know of any problems that have occurred and know when inspections have been completed; and encouraging and investing in more research and development so we can better inspect these thousands of miles of pipes that are aging in our country today.

Finally, my bill encourages your Department, Ms. Coyner, to develop strong and substantive partnerships with States if the States have the ability and resources to regulate the pipelines in their State.

Your budget in brief actually says, "RSPA will expand and strengthen its partnership with the States." And I think we should be expanding and strengthening those partnerships. But in contrast, I understand that you have informed the States that are currently participating in some of these joint Federal/State pipeline safety programs that you are going to phase out of that State participation.

Can you tell me exactly what you mean when you say you want to expand and strengthen these partnerships with the States and maybe what you feel comfortable with in States having regulatory authority over these pipelines?

Ms. COYNER. The President's budget request asks for what we would consider full funding of the State partnership grant program included in the current Pipeline Safety Act, and that is up to 50 percent of the expense of the program. It is critical, as you know, to have the technical resources and the inspection resources at the State level in order for them to be effective regulators and enforcers of the statute.

The issue you referred to has to do with a fairly narrow issue in terms of what we call interstate agency status. This has to do with a particular way we engage with the States on looking at interstate pipelines.

Senator MURRAY. Inter or intra?

Ms. COYNER. Inter, lines that run between States. I know that one is a hard one to enunciate well.

This has been part of a 6-year effort to change the direction of that program to focus on high risk areas and to better coordinate our inspection activities. It is not an effort to eliminate our partnership activities, but instead to focus really on two things. One is to make sure that we are getting the local resources adequately fo-

cused on intrastate lines, including local distribution systems where we have the highest rate of fatalities, and the second is to better coordinate our activities on interstate lines.

Senator MURRAY. Very good.

My second question has to do on your rule on qualification of pipeline personnel that became effective, I believe it was, last October. As you know, the NTSB actually requested a rule on operator qualification back in 1987, and following some bad accidents in 1996, one that killed 33 people and injured 69 others, you did publish a notice of proposed rulemaking that will require pipeline operators to develop a written qualification program for individuals that operate these pipelines.

I am concerned that the rule your agency has implemented does not establish a specific training requirement for personnel and actually allows companies to evaluate an individual's ability to perform tasks using things like an oral examination with little or no check by your agency as to the adequacy of those kinds of procedures.

My question to you on this is why you do not think it is feasible to have individual Federal certification and training of these operators who are many times looking at a computer screen to determine whether or not pressures have changed and whether or not any action needs to be taken. It is feasible in the airline industry where the FAA determines the capabilities of individual employees who work on aircraft. So, why can we not employ the same model for pipeline operators?

Ms. COYNER. There are two specific issues, and I think when you described your legislation, you hit on probably the most important technical reason. We do not have the authority to implement a certification program. It was actually taken out of our statute.

But I think that what is important, in terms of looking at safety, is that the operator qualification rule, which was implemented last summer, is not a laissez-faire regulation. It does not allow companies to do whatever they want. Instead it looks at the broadest range of pipeline employees, rather than just focusing on, say, the person who is at the control panel. I think that is something that distinguishes us from what the FAA regulations look at.

And it is our expectation that the person who sits at the control panel would be appropriately certified, that the welder who works on the line would also be appropriately certified, and that as we have begun checking on the implementation of that effort, we are looking for those kinds of things in the plans, and we will look at that when we do the enforcement once the rule becomes fully effective.

Senator MURRAY. I think the expectation is not being met. So, I think that is something we do need to authorize.

On another area, the testing of pipelines which had considerable discussion in my State—actually, you have been required since 1992 to implement a rule that would require regular inspection of these pipelines. My bill and the House bill requires periodic inspections at least every 5 years, depending on the geography of the area.

Is your rule going to require mandatory inspections? And if not, what mechanisms are in place to ensure that we are relying on

more than just the industry's own self-interests in terms of inspection?

Ms. COYNER. In terms of the periodic inspection, I believe you are referring to the use of what we call smart pigs, internal inspection devices. Our expectation is that we will have a proposed rule out in the next several weeks requiring periodic testing of liquid lines, and that will be followed by a proposal concerning natural gas lines.

There are two other issues which I think are important to note. One is that internal inspections are not the only way that we require companies to inspect their lines. There are a number of other techniques available to us such as leak detection surveys, aerial surveys that we conduct, and looking at what is going on with valves.

But we believe, as I know that you do, that this is not going to get us where we need to be, and that part of the critical success here is that we develop new ways to inspect pipelines that cannot be inspected by these existing internal inspection devices. The budget request includes money for research and technology that would help us push further in that direction, and I know that your bill includes that as well.

Senator MURRAY. Right. My bill also includes research and development.

I have actually been surprised to find out how little we know about inspections and how best to do it. The so-called smart pigs can only test about 20 percent of the pipes out there right now is my understanding. An 80 percent of the pipeline that is currently laid cannot be inspected by that. As I said, these pipelines are getting older, 25, 30, 35 years old now. As they age, there are going to be problems.

For the chairman's knowledge, when this occurred in my State I thought it was a unique accident. I was quite surprised, in doing my research, to find out there have been over 5,500 accidents in this country since 1992, with I believe over 300 deaths and many millions of dollars in damage done, both environmentally and in a lot of other areas.

So, it is an issue that is of great concern to me. It should be of great concern to this entire country, and it is going to continue to be a problem until we find better ways to inspect these pipes, require routine inspection of them, and make sure that the people who are operating these pipelines have been correctly certified and trained.

So, I am going to continue to push my legislation and talk to anybody who will listen to me about this. I do not want any more kids or families to go through what happened in my State. And I know that without us really pushing on this, it will occur again.

So, Ms. Coyner, I really wanted to know as well when the administration is going to send over their reauthorization bill to Congress.

Ms. COYNER. I expect that it will be transmitted very soon.

Senator MURRAY. Because we expect to have a hearing very shortly on this.

Again, Mr. Chairman, I thank you for your indulgence on focusing on this one area, but it is a very critical one and I think one

that this Congress needs to take note of. Thank you, Mr. Chairman.

Senator SHELBY. Thank you, Senator.

IMPACT OF AVIATION FIREWALL

Admiral Loy, the Commandant of the Coast Guard, testified that an aviation firewall with a guaranteed general fund subsidy would "bring this organization to its knees." I assure you that the detrimental impact on the Coast Guard of an aviation firewall is more dire today than it was last March. Would you agree with that?

Admiral CARD. Sir, I have already said how important every dollar we have is in the budget. Anything that would take those dollars away would by very detrimental to the Coast Guard.

Senator SHELBY. You are on thin ice to begin with, are you not?

Admiral CARD. Yes, sir.

Senator SHELBY. If legislation is enacted that guarantees a certain level of general funds on top of the airport and airways trust fund receipts and interest for the aviation accounts and navigational user fees are not enacted, what type of impact do you think that will have on the Coast Guard's search and rescue operations that we have been talking about?

Admiral CARD. Well, Mr. Chairman, earlier I said that safety is job one. I suspect that many other things would be cut back quite a bit. But anything that is going to cut back all those things and cut back our people will impact search and rescue operations as well. We think we are finely tuned, and we scrap for every dollar we get. What we do not get, you can see some of the results in the readiness concerns we have had.

Senator SHELBY. You do a good job, an excellent job, with what you have, but you are stretched. Are you not, sir?

Admiral CARD. We have been, and this budget will help us get better. But there are still, as I mentioned, readiness concerns.

HIGH PRIORITY INITIATIVES

Senator SHELBY. Ms. Millman, the President's budget requests an increase of $126 million above last year's appropriation to bolster the core research program and launch several so-called flagship initiatives regarding aggressive drivers, aging drivers, and younger drivers. Two weeks ago at a hearing on the Department of Transportation management challenges, however, I stated that the subcommittee would not support the diversion of highway funds for non-highway purposes. Considering that last year Congress rejected a similar approach, I would have thought that the administration would have proposed general funds to finance your increases. Unfortunately, for both of us, budget gimmicks have consequences.

Keeping in mind that it is highly improbable that Congress can find the general funds to fully fund your budget request, which of these initiatives or others that I have not named would you consider of the highest priority for funding this year and what would you defer?

Well, you know, you have got to make choices. If you do not make choices, we make choices for you but would rather you make choices.

Ms. MILLMAN. Right.

Senator SHELBY. Well, let me add this before you answer. Which priority programs would bring the greatest safety benefits to the driving public? Is that fair?

Ms. MILLMAN. Yes, and that is the basis on which we would make the determination which programs——

Senator SHELBY. Which ones would they be?

Ms. MILLMAN. Most important is seat belts.

Senator SHELBY. I know they all contribute, but just name some priorities.

Ms. MILLMAN. Seat belts are the most effective safety device that we have. Depending on the type of vehicle, they can increase the chance of surviving a crash by 50 to 80 percent. So, increasing seat belt use will always be one of our highest priorities.

That is a crash worthiness type of technology. If you are in a crash, how can you protect yourself?

Senator SHELBY. We saw an instance of that recently in Kansas City, did we not?

Ms. MILLMAN. Yes.

Senator SHELBY. Where out of three, two did not have their seat belts on. One did and one walks away. Two are killed. One killed. One later dies.

Ms. MILLMAN. That is right.

Senator SHELBY. Right?

Ms. MILLMAN. Yes.

Senator SHELBY. And if the seat belts were on, all three may have walked away or at least been survivors.

Ms. MILLMAN. Looking at the accident, that was our analysis.

But something we can do to avoid crashes in the first place is continuing to focus on alcohol-impaired driving.

Senator SHELBY. Absolutely. We have come a long way there, have we not?

Ms. MILLMAN. We certainly have. We were around 25,000 deaths per year in alcohol involved crashes. Now we are about 16,000, but 16,000 a year is still way too high.

Senator SHELBY. How many of those are younger people? Do you have a breakdown on the accidents related to alcohol?

Ms. MILLMAN. I can get you those numbers. But we know that teenagers tend to have a high use of alcohol when they are in fatal crashes.

Senator SHELBY. Can you furnish that for the record?

Ms. MILLMAN. Yes, certainly.

[The information follows:]

Persons Killed, by Age and Highest Blood Alcohol Concentration (BAC) in the Crash

Age (Years)	Highest BAC in Crash								Total	
	0.00		0.01-0.09		0.10 or Higher		0.01 and Higher			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<5	599	79	55	7	103	14	158	21	**757**	**100**
5-9	637	80	53	7	105	13	159	20	**796**	**100**
10-15	1,128	78	114	8	195	14	309	22	**1,437**	**100**
16-20	3,623	63	605	11	1,500	26	2,104	37	**5,727**	**100**
21-24	1,643	44	413	11	1,713	45	2,126	56	**3,769**	**100**
25-34	3,224	47	663	10	3,041	44	3,704	53	**6,928**	**100**
35-44	3,266	49	592	9	2,838	42	3,430	51	**6,696**	**100**
45-54	2,833	59	375	8	1,577	33	1,952	41	**4,785**	**100**
55-64	2,298	72	220	7	683	21	904	28	**3,202**	**100**
65-74	2,565	82	177	6	390	12	567	18	**3,132**	**100**
>74	3,664	89	204	5	269	7	473	11	**4,137**	**100**
Unknown	56	54	7	6	42	40	49	46	**105**	**100**
Total	**25,536**	**62**	**3,479**	**8**	**12,456**	**30**	**15,935**	**38**	**41,471**	**100**

Note: NHTSA estimates alcohol involvement when alcohol test results are unknown.

Senator SHELBY. It will be very interesting.

HAZARDOUS MATERIALS TRANSPORTATION REGISTRATION FEES

Ms. Coyner, on November 4, 1999, Chairman Wolf and I requested that the General Accounting Office perform an evaluation of the hazardous materials emergency preparedness grants program, which is paid for by registration fees charged to hazardous materials shippers and carriers.

Concerns have been raised by some members of the HAZMAT carriers industry that the same shippers and carriers who pay for the HMEP grants program through their user fees also participate in and pay for well-established emergency planning and training programs in the private sector.

We asked GAO to determine whether the grants program goals are being met by existing private sector initiatives and to identify any duplication of services.

Last week RSPA promulgated a final rulemaking on the hazardous materials registration fee increase. I believe it was February 14 in the Federal Register. Do you think it was premature for RSPA to move forward with the assessment of a fee increase when the need for such an increase has not yet been reviewed by an impartial party such as the GAO?

Ms. COYNER. We have been engaged in an effort for a number of years now with respect to the hazardous materials emergency grants program in terms of looking at what the total authorized levels have been and the unmet needs in terms of training individuals and being prepared. Our view is that one of the most important things we can do to impact what happens if there is a haz-

ardous materials incident is to have trained responders, and that we are severely under-resourced in that particular effort.

The rulemaking went through the usual process of notice and public comment, as well as a number of informal workshops.

We have worked closely with the GAO on their study and review of this particular aspect of emergency preparedness, and we will continue to do so and will take into account their recommendations when they move forward on that particular study.

Senator SHELBY. Can I have your personal commitment that should—should because we do not know—GAO determine that there is a duplication of services among the private sector initiatives, other Federal emergency response programs, and your agency's emergency preparedness programs, that you would revisit the rulemaking in some way?

Ms. COYNER. You can have my commitment that I would be glad to discuss with you the outcome of the GAO study and to take into account implications of it. But I do not want to prejudge the outcome of their study in terms of what their conclusions might be.

Senator SHELBY. Sure, I understand.

GRADE CROSSING COLLISIONS

Mrs. Molitoris, according to the Federal Railroad Administration's hearing record last year, my State of Alabama had the fourth highest, as you know, number of grade crossing collisions in 1998, a total of—think of this—146 accidents in my State of 4.5 million people. Only Texas, much larger, Louisiana, about the same size, and California, the largest State, had more crossing collisions in that year.

I have a fair amount of interest in seeing that the grade crossing safety is improved nationwide, but my State, the fourth largest, and that the number of accidents and deaths at crossings decrease.

It is often said that only truly safe grade crossing is no crossing at all. How are crossing separations such as bridges and flyovers funded?

Ms. MOLITORIS. Would you repeat that last thing? I am sorry. How are what?

Senator SHELBY. How are crossing separations such as bridges and flyovers funded?

Ms. MOLITORIS. It depends, of course, on the particular——

Senator SHELBY. Is it not with Federal highway section 130 funds, which you have no control over?

Ms. MOLITORIS. FRA and FHWA work together. Section 130 money can be used for hazard elimination. That is what it is called. It can be used for warning devices, closings or bridges. It is important to note that annual section 130 funds provided to a State usually are not sufficient to cover the cost of constructing a single bridge. You will find that most States will use other Highway Trust Fund sources for major infrastructure investments such as bridges.

One of the things that we are encouraging from TEA–21 is a corridor approach, Mr. Chairman. That would be to look at a long distance, several miles or 20 miles, and examine what are the most appropriate and safe installations.

Senator SHELBY. Well, what we are interested in for railroads, trucks, cars, and planes is saving lives. Safety.

Ms. MOLITORIS. Yes.

ACCIDENT AND FATALITY DATABASE

Senator SHELBY. Your agency collects data on grade crossing accidents and trespassing fatalities on the general railway system from every State and territory in the United States. However, your accident and fatalities database does not include rail transit grade crossing and trespassing incidents. Is that correct?

Ms. MOLITORIS. The entire database, Mr. Chairman—we have asked in our safety bill to have it increased so that the required information is——

Senator SHELBY. But to have an accurate database, should not all rail crossings and trespassing accidents and fatalities be part of the database?

Ms. MOLITORIS. That would be the most opportune. Yes, it would.

NATIONAL DISTRESS AND RESPONSE SYSTEM

Senator SHELBY. Admiral Card, there have been a number of maritime accidents over the past few years in which the failure of the Coast Guard—we know you do a lot of work, good work, and we are big supporters, as you know, but there are failures. The failure of the Coast Guard to identify a distress call and initiate a search and rescue response in sufficient time has been a contributing factor to the loss of life. These tragedies highlight the need to modernize the National Distress and Response System and upgrade the capabilities of a system that was built nearly 30 years ago.

Staff informs me that the acquisition strategy for this important modernization program is following the model used for the Deep Water Replacement Project. I am concerned that the Coast Guard would choose a complex, unproven acquisition approach for a system that is fundamental to the safety of recreational and commercial boaters.

Now, what is the status of the National Distress and Response System modernization project? Where are we?

Admiral CARD. Mr. Chairman, the request for proposal was on the street and we have had responses back to the request for proposal. It is a two-phased approach to buy this. The first phase enables us to figure out what the design should be and put it in place, and the second phase will allow us to buy all the systems. So, we expect that by 2005 or 2006, it will all be in place. The first phase will be completed about 2001 or 2002.

This is a combination of an information technology system, as well as a distress system. We are concerned and we want to make sure we get it right. We think that the strategy we put together will do that for us.

Senator SHELBY. If Congress provided additional funds for this project to the budget request, would the Coast Guard be able to accelerate the completion of the upgraded system, or is it just going to take some time?

Admiral CARD. It would be able to accelerate the phase two portion of buying it once we have figured out what it is, but the figuring out what it is in the first part will take as long as it will take

to get that right. We are going as quickly as we can with that to make sure it is the right system.

Senator SHELBY. One of the shortcomings, as I understand it, of the current system is that it is dependent upon line of sight communications. In areas where coverage from a line of sight system is poor, such as most of the coastline of Alaska and other States, how will the modernized system improve the ability of the Coast Guard to detect boaters in distress?

Admiral CARD. Well, we will go to other communications technologies. As we are all aware, this sort of technology is increasing greatly. And we will make sure that we cover all the areas for which we are responsible in the new system.

In the meantime, we have tried to do some short-term fixes. We have put a couple of dollars into some DF systems and some better recordings of the messages when they come in so you can understand. We have had some garbled calls. We did not have the right kind of equipment to be able to unscramble those and really hear those very clearly. So, we have done that sort of a short-term fix.

But the real answer is the long-term solution which we are proposing and for which we have money in this year's budget.

Senator SHELBY. Admiral Card, it is my understanding that since the sinking of the recreation vessel *MORNING DEW*, the Coast Guard has initiated several interim measures to improve its search and rescue capability and the national distress system until the modernization project is completed, as you said, in 2005.

What have been the interim measures that have been taken to avoid the recurrence of another accident like *MORNING DEW*?

Admiral CARD. First, and probably the quickest one, was to review all our policies, change those where needed, and make sure that our people understood very clearly what their responsibilities were. And we did that right away.

As I have mentioned, we looked at those opportunities where we could put direction-finding equipment in so that you could tell, when someone was calling, what the line of direction might be. We did not have that. We have that in several places.

We have also, again, bought these recorders and upgraded those.

One thing that *MORNING DEW* did for us is, while we do very well, as you mentioned, you have to examine yourself and say where can we do better. It allowed us to be able to take a hard look at ourselves and improve our performance.

ADVANCED AIR BAG RULE

Senator SHELBY. Ms. Millman, there has been a lot of public attention recently regarding the advanced air bag rule, which is statutorily mandated to be published by March 1, which is just a few days from now.

Although there is widespread agreement with most aspects of the proposed rule, the proposal to return to a 30-mile-per-hour, rigid barrier, unbelted occupant test has created a formidable coalition of opponents that includes air bag suppliers, automobile manufacturers, the National Transportation Safety Board, and a number of respected safety organizations such as the Insurance Institute for Highway Safety, the National Safety Council, AAA, the National Association of Governors' Highway Safety Representatives, and the

American Trauma Society. They strongly oppose this test because it would lead to the installation of high-powered air bags that have caused the deaths of dozens of infants, children, and small adults.

I, as well as other members of this committee, are concerned that the credibility of Federal safety standards are at stake, if that is mandated. This proposed rule could conceivably lead to the use of certain air bags that are once again linked to the death of people who should have survived otherwise, with even the slightest possibility that a return to 30-mile-per-hour test has a potential to result in air bag-induced deaths.

Is there anything to prevent NHTSA from publishing a rule that meets the TEA–21 deadline but doesn't mandate the unbelted rigid barrier tests until the issues are further considered and better information is obtained? I know that is a mouthful.

Ms. MILLMAN. There was a lot in that question.

Senator SHELBY. But you are very familiar with this.

Ms. MILLMAN. I am.

Let me preface my answer with a couple of——

Senator SHELBY. You are aware of all this, but I wanted to put it on the record.

Ms. MILLMAN. Yes.

Senator SHELBY. All these concerns by some blue ribbon groups.

Ms. MILLMAN. Yes.

Air bags, since their introduction in about 1986, have saved over 5,000 people. So, we consider them a very effective occupant-protection technology.

Senator SHELBY. I personally like them. It might save my life, but I am not a small person and I am not an infant. I would like to be smaller, but——

Ms. MILLMAN. Over 5,000 saved, but yes, about 150 killed by air bag-induced injuries.

This is a technology that we have been studying for almost 30 years, and we are certainly doing everything we can in our rulemaking process to analyze the concerns that the auto manufacturers have raised about the speed for the unbelted test.

AIR BAG-RELATED ADULT FATALITIES

Senator SHELBY. Have you conducted or sponsored any research in which actual crash data suggests that adults have died in high-speed crashes because an air bag did not inflate with sufficient force?

Ms. MILLMAN. Yes. In 1997, we changed our rules to allow the manufacturers to use a sled test rather than a full vehicle test, and that is when a lot of the manufacturers made significant design changes to their bags. It would be in vehicles that are model year 1998 or later that would have the redesigned bags. So, there are very few of those vehicles in the fleet right now, and we have not been able to identify any crashes that involved the scenario that you described where an adult would be going through the air bag. But we still have that concern because there are so few of these vehicles in the fleet.

LIFE SAFETY IMPROVEMENTS

Senator SHELBY. Ms. Molitoris, Amtrak recently released a report to Congress on the planned infrastructure improvements to the south end of its northeast corridor, Washington, DC, to New York City. Life safety improvements to the tunnels below Pennsylvania Station in New York City are estimated to cost more than $300 million over the next 10 years. In the FRA's budget, $20 million is requested and was already funded as an advance appropriation in the year 2000 for the Penn Station redevelopment project. Will any of the $20 million in the administration's budget for Penn Station be used for life safety improvements to the tunnels?

Ms. MOLITORIS. Mr. Chairman, Amtrak's planning includes some funds for the life safety development plans, but as you said, to actually fix them is a much larger investment.

Senator SHELBY. But this $20 million I understand is all for construction dollars, which will be at the Amtrak station.

Ms. MOLITORIS. Mr. Chairman, may I get back to you to be sure that I am accurate on that?

Senator SHELBY. Sure, you can.

[The information follows:]

The Pennsylvania Station life safety improvements include improvements to the tunnels immediately beneath Pennsylvania Station and the James A. Farley Post Office Building. To date, Amtrak has spent approximately $35 million on these improvements from funds provided by FRA for Pennsylvania Station. Additional life safety improvements below these two buildings will be included in the final Pennsylvania Station Redevelopment Plan and are estimated to cost approximately $54 million.

TRANSIT CROSSINGS

Ms. MOLITORIS. Mr. Chairman, may I just add to the previous question that you asked about the transit crossings? FTA does collect all of that data. We collect the data on railroad crossings. I think there are very efficient and effective ways to produce that for you together.

Senator SHELBY. You have got a shortfall without all the information, have you not?

Ms. MOLITORIS. Well, it is easy to put that together, sir.

Also, in terms of your State, we would be more than happy to do a special initiative in Alabama to address this very serious problem at your crossings.

Senator SHELBY. Well, I am interested in my State, coming from there, but on the other hand, we are interested in all the States.

Ms. MOLITORIS. As are we, sir.

Senator SHELBY. I pointed out that my State had the fourth highest and it is much smaller than Texas and California in population and in size. But Louisiana was right there I believe number three. Were they not?

Ms. MOLITORIS. I do not know the numbers by heart.

Senator SHELBY. So, there has got to be a reason. Would you look into that too?

Ms. MOLITORIS. I certainly would, sir. You can tell by our charts that we are making progress, but one is too many.

Senator SHELBY. Sure.

[The information follows:]

TEN WORST STATES

State	Number of Crossings	Incidents	Fatalities	Injuries
Texas	18,509	364	41	172
Illinois	15,746	198	53	113
Indiana	9,188	191	26	63
California	12,848	190	24	70
Louisiana	6,716	176	20	70
Ohio	9,585	144	21	54
Georgia	8,385	134	7	39
Mississippi	4,872	131	17	81
Alabama	5,434	122	12	34
Michigan	8,429	114	14	43

Although both Alabama and Louisiana have a relatively high number of crossings based on state size, the most likely factor contributing to the number of injuries and fatalities is the number of crossings without active warning devices. Fewer than 20 percent of Alabama's 5,434 crossings and 18 percent of Louisiana's 6,716 crossings are equipped with these devices.

HIGHWAY-RAIL CROSSING INVENTORY

Senator SHELBY. The Federal Railroad Administration maintains a comprehensive national rail crossing inventory, which is a critical tool in helping States and the railroad industry identify potentially hazardous crossings and prioritize funding decisions.

According to an Inspector General audit of last fall, this inventory is not accurate, with discrepancies in a number of crossings between FRA data and the railroads' own records. Why are the errors and the discrepancies there, or why are there errors? What steps are you taking to correct this?

Ms. MOLITORIS. Mr. Chairman, FRA gets its information from railroads and from States, and it is a fact that many States still do not have a complete and comprehensive database or neglect to update the information for the national inventory.

Senator SHELBY. How do you check that out for accuracy what they are giving?

Ms. MOLITORIS. We work with the States, Mr. Chairman. For example, I know being from Ohio that some 5 or 6 years ago, when they really emphasized corridors, which we were encouraging them to do, they found many crossings that they did not know existed or were in a different location. There have been so many spinoffs, abandonments, changes in the infrastructure in a very rapid fire way during our Administration. The changes have really been dramatic. Sometimes the number of crossings changes dramatically because a whole line is abandoned.

What it takes is a team of State, Federal, and railroad people to go out and walk them and go to see them corridor by corridor. It is a big investment and FRA is encouraging States to do that and railroads as well.

Senator SHELBY. You do not have a big motivator like withholding money, do you? You just have to encourage them to cooperate?

ROLLOVER PROPENSITY RESEARCH

Ms. MOLITORIS. While many have been responsive, Mr. Chairman, there are a number of entities who have not updated their crossing inventories in many year. I do not know of anyone who has refused totally, but it does take money, time, and resources.

Senator SHELBY. Ms. Millman, the National Highway Traffic Safety Administration has had a long-running interest in the area of rollover crashes, and according to your budget justification, the agency's current focus in this area is to develop a formula on rollover propensity and provide a ranking or rating system for consumers. Is that right?

Ms. MILLMAN. Yes.

Senator SHELBY. What is the status of this research effort and what can we expect and when can we expect some specific action to be identified by your agency?

Ms. MILLMAN. Thank you, sir.

This is another issue that we have been looking at for 20 or 30 years. We recently completed the research part of that work, and we have a report available in the docket, which is also available online.

We have prepared a proposal that is currently in the clearance process within the Department. We think that we have a good proposal and that people will support it.

We have found with our front impact and side impact ratings that people just cannot get enough information, and it is one of our most popular locations on our web site. We have seen the manufacturers now start to advertise, when they do well, this is a four star vehicle or five star vehicle. So, we think that the rollover proposal will have that same——

Senator SHELBY. You think the message is out there.

Ms. MILLMAN. It seems that that is what the public wants.

TRUCKS, VANS, AND SUV ROLLOVER PROPENSITY

Senator SHELBY. Do you believe that consumers lack information about the greater rollover propensity of trucks, vans, and SUV's despite the widespread coverage by investigative journalists, consumer advocates, driving enthusiast organizations, yours, and others? Would your limited resources, for example, not be better dedicated to informing the public, which you alluded to, about the issues that they might not be so well informed about through other information channels? I know you mentioned the Internet.

Ms. MILLMAN. Other than?

Senator SHELBY. Anywhere. The more information they have, the better chance they have to make better decisions when they purchase something, which could really be life or death down the road.

Ms. MILLMAN. That is right.

We produce a brochure called Buying a Safer Car that talks about features that add to the safety performance of a vehicle, and we do address the higher rollover propensity of light trucks, vans, and SUVs. What we have seen in our research, though, is that even within a class of vehicles, let us say sport utility vehicles, there are very significant differences in rollover propensity. So, we want people to know that if they have made the decision to buy a

pickup truck, within that group, which ones have better safety performance than others.

ADDRESSING ROLLOVER ISSUES

Senator SHELBY. There are a lot of different ways to address rollover issues: one, a Government rating system for rollover propensity; two, encourage technologies that protect the occupant during this unusual type of crash; three, promote technologies that reduce the vehicle's likelihood of tipping in the first place; four, increasing seat belt usage, which we all believe in in these vehicles. I am sure there are many more. Those are just a few.

Ms. Millman, what should be the focus in this regard and which strategy would save the most lives? Out of the four I mentioned or others that I had not thought of. Seat belts maybe?

Ms. MILLMAN. The most dangerous part of a crash involving a sport utility vehicle is the chance of ejection during a rollover, and we find that seat belt use tends to be lower among SUV occupants than other vehicles. They have a very high number of ejections, which tend to be very serious. So, seat belts certainly would make the most immediate impact.

But, a combination of those techniques that you mentioned is really our best approach. Seat belts certainly in the short term; second, greater dissemination of information like the ratings that we are going to propose. But in the long term, certainly technology can address the propensity issue.

PORT SECURITY

Senator SHELBY. Admiral, port security is important. In the past several months, there have been a rash of incidents involving the smuggling of migrants, mostly from China, into the United States in large cargo ships. This particular activity raises the larger question of port security and safety. Considering that 95 percent of the goods exported and imported are processed at our Nation's ports, port security and safety has significant economic and national defense implications.

What is the role of the Coast Guard in protecting our ports from migrant smuggling, illicit drug trafficking, the threat posed by terrorist groups? And what other Federal, State, and local agencies are involved with you? What initiatives do you have for 2001 in the budget? Is that too much? It is what you do every day.

Admiral CARD. We will get right after it, yes, sir.

I think probably the most significant thing that is going on right now as far as the study goes is the Seaport Security Commission which is underway, including the Coast Guard, Customs, FBI, et cetera, to look at all that we need to have for our seaports.

But certainly the Coast Guard has been involved in our multimission capacity in drugs and migrants and terrorism kinds of things. We have, around the country, all of our units strategically located. Every water area has a Captain of the Port who is in charge of that water area. One of his or her missions is security. That is backed by our Group Commanders as well. So, we have got a network of both command and control and people and resources to pay attention to these things.

Many of these issues are better sought if they are pushed further away from the shore, and so you will see sometimes that we will be interdicting Chinese migrants 50 or 100 miles off the coastline because it is better to do it there. And in our drug strategy, we are trying to push that closer to where they are departing the scene down in Colombia, et cetera.

But more needs to be done. There is concern for terrorism in our country. That is being addressed by this commission. It has also been addressed by the Marine Transportation System study that we brought forward. This budget includes some issues that will protect our people. We are going to be the first responders. We want to have some chemical, biological, radiological kinds of things available, plus some training, to know what to do initially until other agencies get there because we are going to probably be the first on scene, as we are in most cases.

In a larger sense, we also have some other protection things in here for our people, survival equipment, cold weather equipment, some of those kind of things.

But I think you will see out of the Seaport Security Commission things that we are doing. The Coast Guard will have a lead role in port security for our country, and we are located in those places to be able to make that happen.

There will need to be cooperation with everyone else that needs to do it, including the State people and other Federal agencies. In that regard, we have instituted recently our Incident Command System which all State highway people use, fire people use. That makes it easier for us to respond as one when we go to any particular type of an incident.

Senator SHELBY. Thank you.

Senator Lautenberg.

Senator LAUTENBERG. Thanks, Mr. Chairman. I apologize for having been away. One of the things that we were just discussing at the Foreign Operations Subcommittee is our commitment to Colombia and other Latin American countries to see what we can do about stemming the drug flow there. It unfortunately is a constantly expanding business, and when you think about it, the toll taken in our country every year is 52,000 dead and about $110 billion worth of cost, it is an important assignment. And we in no way diminish the effort that the Coast Guard is required to put into it. But that means that we have to take care of other things in other ways.

MSIS SYSTEM

I would ask you a question, Admiral Card, about the MSIS system, a project that was begun back in 1991. And the project is critical to your ability to meet the information needs and legal mandates of your marine safety and law enforcement missions.

The project was supposed to be completed in fiscal year 1996. All of us know that it is now 2000 and we have invested over $45 million. The project is still not completed. Why the delays in getting this done?

Admiral CARD. Probably several, sir, but let me say that the project is now on track to produce what we want in the next year or so. And we have got some money in this budget.

Information technology projects, unlike buying a ship or an airplane or something else, were more difficult for us to get our arms around and describe correctly. I think you were at the other committee meeting earlier when the Chairman asked me about our National Distress and Response System Modernization Project. We are now much more capable of structuring those kinds of projects to be able to get positive results sooner, even though it seems like in the beginning it takes you longer to make sure you have a clear definition of what you want.

We are on track to do that now. We will be off the old system probably within a year with more capability. Our Operations System Center in Martinsburg, West Virginia has picked that up for us.

So, the details of how we got there, probably a combination of not being as clear as we thought we were going to be in the requirements and then some change in the way that the project looked along the way.

But I think we are on track and within a year or a year plus, we will have the old system operating. We need to expand it with our law enforcement system so all of them work together.

Senator LAUTENBERG. I hope that the prediction that it is a year away is more reliable than those forecast in the past.

Admiral CARD. Yes, sir.

HIGH-SPEED TRAINSET TESTING

Senator LAUTENBERG. Ms. Molitoris, good to see you.

Your agency is participating in the testing of the new high-speed train sets over the northeast corridor. You and I had a ride on the not-so-speedy high-speed train, and we are looking forward to the ultimate delivery of the equipment that can shorten the schedules between places.

Now, we have had a problem in terms of getting the high-speed equipment on line. That was due sometime last year, and we know that there was a problem. Tell me what you can about FRA's involvement in testing of the new train sets.

Ms. MOLITORIS. Senator Lautenberg, Mr. Chairman, the Acela trains are going to be a tremendous addition to the fleet of Amtrak, but this is a new technology. As you know, FRA was responsible for the safety requirements that Amtrak incorporated into the specifications, and we have been consistently involved with Bombardier and Amtrak in the testing program. The responsibility really lies with the manufacturer to meet the requirements set by Amtrak and to provide the service required in the contract with Amtrak.

I think we are making good progress, but I have not yet received a total confirmation on the date of delivery of these trains. I think it is fair to say that with a brand new technology of this complexity, it is not unusual to have a significant test period. It was the commitment of the Board and of Amtrak to assure that the introduction of the trains would be at a time when service would be of the highest quality.

One of the exciting things that you and I were able to do was to ride the train totally electrified from Boston to New York. And that was an achievement of no small measure, sir, and a tribute

to your leadership and also the support of the Congress throughout these years.

Senator LAUTENBERG. Well, the fact that we need a long test period is what we understood, and we had train sets tested and running. We had a problem with wheel wear.

And I would have to remind you, Ms. Molitoris, that technology on high-speed rail is certainly not new. It is disappointing, I must say, to learn, whether it is the manufacturer's responsibility or design responsibility and our demand for specifications that were wrong, the fact is that prospects are considerably dimmed by the experience to date. We are anxious to have these train sets in place and operating.

The chairman of this subcommittee is not a fan, and understandably so, because he is skeptical about promises that are made that are not kept. This is the kind of thing that, frankly, gives me a lot of concern. You are kind of a second stage in this, but we hope that when these specifications were given that specs were, A, met and, B, that they were sufficiently designed, that there was sufficient design put into this that we were not asking for the impossible.

Ms. MOLITORIS. Senator Lautenberg, may I just comment? There truly is a tremendous difference between the operating environment in Europe and the operating environment in the Northeast Corridor. It is a much more complex environment. It required specifications that were different. I think that the elements that are being tested and required certainly are the proper ones. We can assure safety to the passengers of the highest level, and I think that we will get there very soon.

Fortunately, at the very same time that these northeast trains were being tested, we have a new high-speed, non-electric locomotive so that the corridors throughout the country—some of very great interest in Birmingham—will be able to have high-speed trains also.

STATE COOPERATION

Senator LAUTENBERG. In order to maintain the speeds that we expect from Acela along the north and the south end of the Northeast Corridor, we are going to require strong cooperation out of the commuter rail authorities from Massachusetts to Virginia. How have things gone so far?

Ms. MOLITORIS. In terms of the relationship, Senator?

Senator LAUTENBERG. Cooperation. Have we gotten what we needed from the States along the way?

Ms. MOLITORIS. Well, I think there is a strong support network among the operators and the States, but indeed, there is a 10- or 12-year—maybe 20-year—outlook on the kinds of improvements in infrastructure to get to an improved state of repair on the south end. That is going to require investments.

I think Amtrak continues to work closely with the commuters because, as you know, it is the commuters that have the huge numbers of trains every single day, especially in New Jersey, New York, and Connecticut.

I think the working partnership is good. There are some elements that are still being discussed, but there certainly is not a

final decision on all of the investments and how much will come from where. That is still under negotiation.

Senator LAUTENBERG. So, we can expect that we will get the kind of help from the commuter organizations that we need and that we will be able, one day, to say that this is a completely coordinated program, because at this point there is a challenge by a lot of the commuters who say they need more of the time on the rail and that they cannot always make way for the high-speed trains to operate. But we hope that we can resolve that conflict and get on with it.

Your budget, with our strong interest in expanded high-speed rail, has a new $468 million initiative. As you know, I have introduced a bill that would support roughly $10 billion in high-speed rail improvements through these federally insured bonds.

RAIL LINE CONGESTION

One problem that is regularly cited as a limitation to deploy high-speed rail around the country is the problem of the right-of-way that is owned by freight rail and freight railroads. And they are busier than they have ever been as well.

What does FRA do to improve the opportunities for use of those tracks, freight-owned tracks, for our high-speed rail needs?

Ms. MOLITORIS. Well, of course, our focus is safety. The requirements that the railroads have to meet require all of our efforts. I do know, serving on the board representing the Secretary, that George Warrington has made a really new effort to become a good partner with the railroads and they with him. I would say to you that it is my observation that there has never been a stronger partnership between the freight railroads and Amtrak.

However, the congestion difficulties that the freights are experiencing, some as fallout from some mergers and acquisitions, impact Amtrak. It is a very difficult situation. I think, however, that there is a real working partnership, train by train, between Amtrak and the freight railroads to try and address this. We are not where we want to be in terms of on-time service, and that is not just on the Northeast Corridor, which is doing very, very well, but it is throughout the country where we have this particular situation where all the tracks are owned by freight railroads.

FRA is working on it. We have got to get the freights in a situation where they have less congestion and backup and more on-time performance themselves and the ability to get Amtrak through in a more timely manner.

AMTRAK/FREIGHT PARTNERSHIPS

Senator LAUTENBERG. Are we going to ask them to do less business? How do we accomplish——

Ms. MOLITORIS. Well, there are many ways, Senator Lautenberg. Certainly operational considerations. Amtrak does, by law, have first right to move.

Also, I think it is interesting to note that the new business partnerships, mail and express business partnerships, that Amtrak is developing with almost every major freight carrier are an incentive for the freight railroads themselves to move Amtrak timely because these freight movements are business partnerships that Amtrak

and Norfolk-Southern, BNSF, Union Pacific have developed. It is really a win-win situation. So, that is enhancing this partnership.

VEHICLE INCOMPATIBILITY

Senator LAUTENBERG. Ms. Millman, I wanted to check something. I was just asking whether it had been discussed earlier, and if it has, please let me know.

Almost half of the new vehicle registrations in 1998 are light trucks, including SUV's, pickups, mini-vans, and they sit higher off the ground. Have you discussed this at all? Has this been asked?

Ms. MILLMAN. Not today, no.

Senator LAUTENBERG. You might get the question occasionally. In an accident between light trucks and conventional cars, the light truck inflicts more damage to the car. Now, a NHTSA study found that a head-on collision between a car and an SUV resulted in five deaths per car driver to one per SUV driver. When the SUV struck the side of the car, there were 30 deaths per car driver for every 1 of an SUV driver.

Now, in light of these findings by your own agency, will the administration undertake any actions to improve safety for the drivers of conventional cars? I hear a lot of worry and concern by drivers of ordinary cars, particularly from those mothers with children in the car and so forth. They are frightened by the prospect. What is being done there?

Ms. MILLMAN. One of our first priorities is always avoid the crash in the first place. So, everything that we are doing on drunk driving and other kinds of crash avoidance activities will help address that specific problem.

We are working with the manufacturers and doing our own research to identify ways that we can address that problem—changing bumper height, changing the way the vehicles manage the crash energy. We do not have a specific rulemaking looking at it now. We are more in the research and analysis phase of it.

Senator LAUTENBERG. Do the automobile companies seem to be concerned as we are about the problems? Business is pretty good in that area, and I do not know whether having to change the configuration of an SUV, to use the general term, is a likely possibility without some pressure from Government. How do you see it?

Ms. MILLMAN. The manufacturers are certainly pleased with the sales of the larger vehicles and are concerned about any requirements that might make them reconfigure those vehicles. But I think that they also recognize the public is interested in safety. We were discussing earlier NHTSA's safety ratings of vehicles. The public is very interested in those. So, I think that the manufacturers have an interest in trying to address the problem.

ROLLOVER STANDARDS

Senator LAUTENBERG. Do you have, for example, a specific time table for establishing rollover standards for SUV's?

Ms. MILLMAN. Our focus right now is on providing more information to consumers so that they have a better understanding of the rollover issue and how individual vehicle models perform. We are not pursuing a regulation or standard at this time.

Senator LAUTENBERG. We impose standards on trucks, on highway design, equipment that is used in construction, things of that nature. Why would it not be of interest to introduce some regulations so that we can ensure the bulk of the automobile-riding public that they are as safe as we would like to see them be, considering the difference in the structure of the vehicles?

Ms. MILLMAN. The agency has been trying to answer that question for 30 some years.

One of the concerns is defining the threshold. If we were trying to say that there was a limit on rollover propensity, we would have——

Senator LAUTENBERG. Do we have rollover standards for regular cars?

Ms. MILLMAN. No.

So, in trying to set rollover propensity limits, we are asking at what point are we likely to see serious injury if there is a crash, and we have not been able to define those limits.

Also, several factors play into the equation of whether the rollover is going to occur, and driver behavior is a significant part of that.

CONSTRUCTION STANDARDS FOR ROLLOVER PREVENTION

Senator LAUTENBERG. Yes, but the construction standards for automobiles include the impact of a rollover as well. Does it not?

Ms. MILLMAN. I am sorry. I did not follow your question.

Senator LAUTENBERG. Well, in the construction standards for cars, is there not a consideration of impact of an accident in terms of possible rollover?

Ms. MILLMAN. I do not believe so, no, but I will double check on that.

Senator LAUTENBERG. Is there a roof-crush standard?

Ms. MILLMAN. Yes.

Senator LAUTENBERG. So, it sounds to me like we ought to take a little bit closer look at the SUV's and that line of vehicles.

I thank you very much, all of you. And thank you, Mr. Chairman.

Senator SHELBY. Thank you, Senator Lautenberg.

Senator Gorton could not be here today, but I would like to note for the record that my colleague from Washington State, Senator Slade Gorton, wanted to be here to discuss the pipeline safety program and last summer's fatal accident, but he has been unavoidably detained. We will submit his statement on this issue for the record.

Senator LAUTENBERG. Mr. Chairman, may I just interrupt for a unanimous consent request, that a speech made by the Commandant, Admiral Loy, in December entitled Readiness: The Reality Behind the Numbers, be included in the record?

Senator SHELBY. Without objection, it is so ordered.

PREPARED STATEMENT OF SENATOR SLADE GORTON

Mr. Chairman, a tragic pipeline accident in Washington state last year that killed three young people has focused my attention, as it has my colleague's, Senator Murray's, and that of the entire Washington state delegation, on the operation and funding of a relatively small office within the Department of Transportation with the enormous responsibility of ensuring the safety of liquid and gas pipelines. I see

that the Administrator of the Office of Research and Special Programs, Kelley Coyner, within which the Office of Pipeline Safety is located will testify today.

I am pleased to see that the President has recommended an increase in funding for OPS. While the proposed expenditures sound reasonable, it was unclear to me from reading the budget how much of the funds and OPS resources will be committed to concluding rule-makings that are required by Federal law, but that are shockingly overdue: in some cases by more than five years. These rules are intended to deal with issues critical to pipeline safety, including the use and frequency of internal pipeline inspection and the use of emergency flow restricting devices and leak detection equipment. I understand that OPS intends, prompted largely by the tragedy in Bellingham, to consolidate many of these rulemakings into a single "pipeline integrity" proceeding that it hopes to conclude this year, at least with respect to large operators. I expect the Office of Pipeline Safety to do this, and to make this rulemaking an absolute priority.

Because of the interstate nature of pipelines, Federal laws and rules regarding their safety are largely preemptive, which is to say that states are generally prohibited from adopting stricter safety standards. Legislation introduced in both the House by Representative Metcalf, and in the Senate by Senator Murray, would relax this Federal preemption. I agree that state and local governments should have more authority. While Senator Murray's bill does not address this issue as directly as many in Washington state would like, it makes an excellent start and I intend very shortly to co-sponsor the bill and work with her on amending it to reflect the comments and concerns of the many interested parties in Washington state.

The debate over Federal preemption, however, will be held in the Commerce Committee, not here. For purposes of appropriations it is important to recognize that despite preemption, states play a significant role in pipeline safety. They regulate, by mile, significantly more pipeline than does the Federal Government because they are regulate intrastate lines. On very limited occasions, the OPS has also designated states as its agent for purposes of inspecting interstate liquid pipelines, a designation that I understand Washington state would like to obtain in the interim before it is permitted by Federal law to assume greater authority. To assist states with these responsibilities, the Federal Government provides grants of up to 50 percent of the cost of state programs. I fully support an increase in the funds available for these grants to help cover the costs in 2001 of the new pipeline safety functions that have been proposed in a bill moving through the Washington state legislature.

READINESS: THE REALITY BEHIND THE NUMBERS

AMENITIES

It has been said that "a conference is a meeting to decide where the next meeting will take place." That may be true of the WTO meeting out in Seattle this week, but I have much higher hopes for this gathering. My confidence comes partly from knowing that the importance of military readiness will draw the serious attention it deserves and partly because the CNA has done its homework so well in creating a forum for us to consider readiness issues in a way that can actually lead to improving readiness.

The panel topics are relevant and practical. How do we assess readiness? Is there a people problem? Has operational tempo affected readiness? What are the operators saying? Have we shortchanged training, maintenance, and spare parts? How should we protect readiness?

I'm delighted to join you as you grapple with these issues. I am grateful to Robert Murray [President of CNA], Dr. Samuel Kleinman [CNA VP], and Dr. Laura Junor [Conference Director] for their role in bringing us together. And I thank all of the conference participants and attendees for your commitment to military readiness.

INTRODUCTION: DIFFERENCES BETWEEN BUSINESS AND MILITARY MEASUREMENT

Dave Thomas—the fellow who founded the Wendy's hamburger chain—wrote a book about his meandering path to success in life. In that book, he briefly explained his approach to measuring the health of his company.

As you might imagine from the commercials you've seen, Mr. Thomas didn't spend a lot of time poring over spreadsheets. He was a hands-on leader. He formed the habit of identifying a very small set of numbers that gave him a good sense of what was going on. He briefly checked those numbers every day, and then he spent the bulk of his energy out on the floor with his customers and employees exercising the kind of leadership needed to keep the numbers tending in the direction he wanted.

These few numbers tracked carefully—combined with a lot of personal involvement—were all he needed to have a clear grasp of where he stood.

Those of us in the readiness business quickly encounter problems when we try to follow Mr. Thomas's worthy example. If a small set of numbers exists that can convey an accurate sense of overall military readiness, it has so far eluded the most determined efforts to find it. Three important differences between hamburger stands and armed forces keep us from nailing down a convenient index of readiness.

One difference between Dave's way and our way is that businesses measure results whereas military planners measure potential. Instead of measuring what we have done—how many hamburgers we sold and how much money we get to keep—we try to measure surge capacity—what level of effort would we amass if faced with an emergency?

A second difference is that extraordinary human effort can undermine the apparent reliability of the measures that do portray our readiness condition. The devotion to duty so prevalent among service members often puts the lie to our honest claims of reduced capability. We saw that happen a couple months ago when Hurricanes Dennis and Floyd hit the eastern seaboard. The public saw the Coast Guard at the center of a massive and well coordinated disaster relief effort. What they didn't see was the intense scramble to locate parts and perform maintenance to get all of our Elizabeth City C–130's operational and to keep them flying throughout the operation. The performance they delivered could not have been predicted from analyzing our availability statistics, and we shouldn't kid ourselves into believing we can expect similar results as a matter of course.

A third difference is that our measures resist aggregation. No matter how big a hamburger chain grows, you can combine the financial statements of the individual units, look at the totals and the ratios between various lines, and get an idea of the overall strength. It's a lot harder to see what combinations of military units might be able to do if they are needed to work together.

The difficulty of measuring an intangible element like potential output quickly leads to the even more daunting challenge of explaining the basis for our readiness concerns to the American public, the administration, and to Congress.

My plan this morning is to skirt these difficulties in measurement by looking in detail at a single operational community within the Coast Guard—our fleet of C–130 aircraft—and illustrating how our parts shortages, personnel issues, and increased optempo are serious individual problems that compound the effects of the other problems.

I will focus on C–130's for three reasons.

First, they are a common currency among the armed services. Everybody flies them, so the lessons they offer may resonate more broadly through the audience than those of systems unique to the Coast Guard. C–130's are the class of operating assets that is most dependent on DOD systems. Many of the stresses we feel are downstream manifestations of pain that is also felt by DOD.

Second, C–130's are a microcosm of the readiness problems that face every operational community within the Coast Guard. The combination of aging assets and sensors, increased operational tempo, personnel shortages and inexperience, and parts shortages that besets our C–130's also hinders the effectiveness of our cutters and our other aircraft.

Third, C–130's epitomize previously stable trend lines that are now headed in the wrong direction. Four or five years ago, C–130's were our most reliable platform. Now we struggle to meet even our normal day-to-day commitments.

OPTEMPO, PARTS, AND PEOPLE

Those trend lines raise serious concerns. Over the past four years, HC–130 availability has dropped from almost eighty percent to barely sixty percent. Air Station Elizabeth City, North Carolina, has five C–130's, and they are expected to have one of them immediately available at all times. During the first six months of 1998, they met the standard for ail but one hour. During the first six months of this year, the hours without a ready plane jumped to thirty seven. A standard we used to achieve easily now seems unattainable. E City hasn't gone a single month without a coverage gap in more than a year.

Optempo immediately looms as one cause. We've always worked our C–130's hard. They're getting old. They fly low altitude patrols in a salty environment, and we program them to fly about a third more hours than the DOD services do. Over the past few years, we haven't added new planes, and our Search and Rescue obligations haven't been reduced, but we have asked our C–130's to perform a lot of deployments in support of our drug interdiction mission. As a result, C–130 days away from home station have increased more than 60 percent over the last four years.

We've lost a full 25 percent of our availability while piling on additional mission requirements. That one-two punch consumes a whole lot of flexibility and surge capacity. Optempo feeds our parts problems. Older assets worked harder can be expected to break more often. When they do, they need more parts—parts that are becoming more scarce and more expensive.

We try to keep the percentage of hours for which aircraft are not mission capable because of parts to less than five percent. Before 1995, we were consistently at or near this standard. Since then, our parts-related unavailability has steadily risen, standing now at about 16 percent, more than three times higher than it ought to be. Over this same period, the inventory value of C–130 parts awaiting repair or replacement has doubled.

As budgets increase more slowly than costs, the problem reaches crisis proportions and desperately improvident measures suddenly seem reasonable and necessary. We look for other sources of funds—places like the training budget—and we cannibalize parts from otherwise serviceable aircraft to keep others flying.

Experienced aviators recall times when cannibalization simply was not done. Today it is almost routine for air stations to have a designated "Hangar Queen" out of service for months at a time because its parts have been transplanted in other air frames. Cannibalization takes planes out of the rotation, increases the workload and maintenance on the other planes, and depletes flexibility in meeting response requirements.

Worse still, cannibalization transmutes our parts shortage into personnel problems. When we cannibalize, we double the maintenance workload. The normal way for a mechanic to replace a part is to take a box off a shelf, remove the defective part, and install the new part. One part removed, one part installed. With cannibalization, two parts have to be removed and two parts have to be installed.

This doubled work is performed today by less experienced maintenance crews than we had working a few years ago. The average time in grade of our chief aviation mechanics has dropped 50 percent over the last five years. What this means is that less experienced crews who should be getting more training are instead performing the extra work occasioned by cannibalization.

These personnel pressures inevitably affect retention. We train our aircraft mechanics to be professionals, and they take pride in doing their jobs right. Because they are professionals, they know when we're doubling their work, and they know that cannibalization isn't the right way to do their job. Sooner or later, they have to ask whether they are willing to work twice as hard as they should in order to get paid less than they're worth to do a job in a way that offends their professional conscience. When they leave, our personnel shortages get worse.

Overworking inexperienced crews in a good economy is not a good prescription for improving retention.

The story here is that optempo, parts, and personnel problems feed off each other and compound each other.

CONSEQUENCES

The practical real world consequences of this situation play out in our routine operations. During the month of October, we observed the following situations as a result of C–130 readiness problems. We missed law enforcement missions in Florida and in Alaska. We lost track of a suspected drug smuggler because maintenance issues forced a late launch. We lost training flights to SAR and LE missions. C–130's left their home bases late and returned early from law enforcement deployments because of maintenance problems. We had C–130's fly search and rescue missions at higher than normal search altitudes to compensate for cabin cooling limitations, thereby reducing the probability of detection. And we had C–130's reduced to visual searches because their radars didn't work.

When we suffer such effects in one month of normal operations, we know we're operating without a net when called to perform major operations.

We almost had a dramatic example when Hurricane Lenny cut a swath through the Caribbean a couple weeks ago. We had a deployed C–130 in the region, and like most C–130's it had deployed with exactly one crew—we can't afford to send spares.

Just when the C–130 was needed for disaster relief operations, one of the crew members needed a root canal and was medically grounded. As it happened, the afflicted person was a basic air crewman, and the operational commander granted a waiver to fly one person short. It worked out fine. However, if almost anybody else on that crew had needed that root canal, the flight would have been canceled. Think about it, the United States Coast Guard, Semper Paratus since 1790, was one toothache away from not being able to respond to a hurricane!

One aviator recently told me, "What we're doing now is all that we can do." The frugal taxpayer may rejoice to hear this proclamation, but the stranded boater surely does not.

The commanding officer at Air Station Barbers Point in Hawaii recalls the airlift undertaken when the super typhoon Paka hit Guam around Christmas of 1997. We mounted an all-out relief effort to bring Red Cross supplies out to the western Pacific. Looking at current availability rates for his C–130's, he doubts he could deliver an encore performance this Christmas.

These problems also affect other armed services. Our air station out in Hawaii has a Long-Range Intercept mission requirement to have a C–130 available in case a civilian airplane has to ditch. Our air station increasingly finds itself unable to meet this requirement and has had to pass it off to Navy P–3s for as much as two days at a time. The P–3's are less well suited for this mission, and they already have jobs. So our readiness problem ends up becoming the Navy's readiness problem.

If that had happened last week, the results could have been deadly. A general aviation plane did have to make a nighttime ditching, and a C–130 was needed to get on scene to mark the ditch course with lights and get a fix on the downed aircraft.

AIRSTA SACRAMENTO SAR CASE: LACK OF READINESS MAY ALREADY BE COSTING US LIVES

In one case last month, our readiness problems may have prevented us from saving a life. Air Station Sacramento has four C–130's. At the time of this incident, the first C–130 was the ready aircraft on immediate standby, and a second was ready to fly as a backup to the first. The third plane was deployed for counterdrug operations out of the country, and the fourth one was the hangar queen. It had been out of service since April and was being used as a parts source for the other planes.

This situation might have been tenable except that the second C–130—the backup to the ready aircraft—was overdue for some maintenance that could be extended only for a few more days before the airplane would have to be grounded.

The air station had to perform the maintenance, but scheduling the maintenance required them to choose a day on which they would have no backup to the ready C–130. Not having a backup is a bad situation for a search and rescue unit because mariners tend not to consult our availability schedules before getting themselves lost, and some of them persist in remaining lost until multiple sorties are flown.

But there was no choice. The air station picked a day with no law enforcement patrols planned, scheduled the maintenance, and took the plane off line to perform the work. Sure enough, there was a SAR call on the day they picked. Ordered to locate the source of an EPIRB alarm, the ready aircraft took off, flew 500 miles off Cape Mendocino, and found a genuine distress situation. A dismasted sailboat was battling 70 mile per hour winds, mountainous seas, and low visibility. The boat's lone occupant was in serious trouble. The air crew could see him through the weather from time to time, but they couldn't establish communications. They dropped a radio to the sailboat, but the operator wasn't able to retrieve it from the heavy seas.

Surface units were en route, but help was hours away.

In a case like this—crippled vessel, extreme weather, no communications—we definitely wanted to maintain continuous air presence until a cutter could arrive on scene. And we could have maintained that presence if our second C–130 had been ready to fly.

But it wasn't. It was being worked on, and there was no way to button it back together in time. We looked for other assets and found an Air National Guard C–130 in Portland, Oregon, but the distances involved meant that our C–130 would head home well before the relief plane arrived.

The Air National Guard plane reached the scene as night was failing. By that time, the EPIRB had stopped transmitting. There was no sign of the sailboat, no sign of its occupant. Nothing but wind and waves and rain.

We searched for six days. We flew eleven C–130 sorties from Sacramento. We brought in a buoy tender, a medium endurance cutter, and a high endurance cutter with an embarked HH–65 helicopter. The Air National Guard continued to provide C–130 support, and a USNS ship diverted to help. A huge effort. Spent more than we did on the more publicized JFK case. All we found was some debris.

A second C–130 might not have made any difference to the lost sailor. It's possible that he would have died even if we had kept a plane overhead. But at the very least, we would have known when and where his boat went down.

This case illustrates four unacceptable consequences of our readiness situation. First, we jeopardize our own crews by sending them into situations in which we

know we can't provide a backup if they get into trouble. Second, we don't have the confidence we ought to have that we are giving stricken mariners the best possible chance to be rescued. Third, our inability to do the job right the first time requires the expenditure of far more resources than would have been needed if the right assets had been available when first needed. And fourth, when we finally close the case, we find our already precarious readiness posture has been further degraded by the parts and the people we burned out in the too-much-too late rescue effort.

A readiness climate in which we habitually make extraordinary expenditures when it's too late because we can't bring the right resources to bear when it matters is simply intolerable to me—and ought to be intolerable to the American public.

CONCLUSION

Earlier in my remarks, I mentioned a ditching case out in Hawaii. Everybody involved in that case praised the downed pilot for his poise and professionalism. After being rescued, the pilot explained why he remained calm and confident throughout his ordeal. He said, "You know if you can hang on until the next morning that you're going to make it because the Coast Guard is going to come and get you. It's just a matter of if you can hang on."

Will Rogers once said that it's not what you don't know that gets you in trouble, it's the things you know that ain't so. This civilian pilot represents the American public in that he "knows" the Coast Guard will be there to save him if he can just hang on. Unfortunately, his knowing doesn't make it so.

I believe the readiness problems in the C–130 world mirror similar problems of similar magnitude in our other operational communities. In fact, given that our C–130 fleet is younger and better maintained than many of our cutters, it's almost inevitable.

The unfavorable trends in aircraft availability, parts inventories, and crew experience challenge our ability to provide mariners in distress with the rescue services Americans have come to expect.

These problems impose two responsibilities upon us, which I will offer as challenges for this conference.

The first responsibility is to speak frankly about the seriousness and the extent of the problems we face. We cannot permit the public to learn of this situation only when we fail dramatically to provide some service the taxpayers think they paid for. Many of our readiness issues are the sort of problem that really can be solved by throwing money at them. Twelve or thirteen million dollars to restore our parts inventories to where they were a few years ago would be a nice place to start. We should say so.

The second responsibility is to come up with better ways to think about managing our readiness challenges. Understanding that immediate relief from budgetary constraints is unlikely, we need to attend very seriously to the problems that will persist when we shake the money tree and nothing falls into our baskets. Not having enough is not a sufficient reason for not doing our best with what we have. We will all face difficult choices about balance, setting priorities, deciding where to allocate the next dollar. This conference offers an excellent opportunity to frame our understanding of the work that lies ahead.

Thank you.

ADDITIONAL COMMITTEE QUESTIONS

Senator SHELBY. Additional committee questions will be sent to the respective agencies for response in the record.

[The following questions were not asked at the hearing, but were submitted to the Agencies for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO THE RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

DEPARTMENT-WIDE REVIEW OF THE HAZARDOUS MATERIALS PROGRAM

Question. DOT will release shortly a departmental Hazardous Materials Program Evaluation in which the Office of Inspector General participated. What results do you expect from this evaluation?

Answer. The evaluation is showing some positive trends. For example, we expect DOT to establish a central focal point to coordinate a DOT-wide Hazardous Mate-

rials program. We will let Congress know when the results of this evaluation are released.

USER FEES

Question. What has been the reaction from the pipeline industry to this proposed increase in user fees.

Answer. It would not be appropriate for us to speak for the industry on this matter.

Question. If the proposed increase in user fees is rejected by Congress (as so many of the Administration's user fee proposals have been), what other potential funding sources are available.

Answer. We have no other proposed funding source.

GRANTS

Question. Why are interstate pipeline companies being asked to shoulder the entire cost of this program despite the authorization?

Answer. Outside force damage associated with construction is the leading cause of pipeline failures. It is the cause of at least 33 percent and 18 percent of the incidents in Gas Transmission and in Hazardous liquid lines, respectively. When we determine pipeline user fees, we prorate the assessment between gas and liquid in accordance with the degree of benefit which they accrue as a result of the Pipeline Safety program implementation.

QUESTIONS SUBMITTED BY SENATOR PATTY MURRAY

INTERSTATE PIPELINES

Question. What do you mean when you say that you want to expand and strengthen partnerships with states?

Answer. We have been committed over the past several years to working with states to strengthen the pipeline safety partnership and to providing adequate resources to support their activities. This budget provides record resources to increase states capabilities and builds on the actions we have taken in the State of Washington to work together to comprehensively evaluate and improve pipeline safety.

Question. Could you explain in what areas you would be comfortable seeing states have regulatory authority over interstate pipelines if they prove they have the money and the expertise to do so?

Answer. We do not support giving the states regulatory authority over interstate pipelines. The intention to "expand and strengthen partnerships with states" did not include giving states regulatory authority. Yet, we support states lending their technical knowledge and expertise to the Office of Pipeline Safety's oversight of interstate pipelines in areas where states knowledge of local safety and environmental concerns can be used to improve pipeline safety. We also support states being involved in responding to incidents, investigating and monitoring corrective measures with respect to safety-related conditions and other local conditions that increase risks to pipelines, handling local complaints and related inquiries, monitoring pipeline construction and reporting noncompliance with design and construction standards to OPS. We appreciate the states' involvement and knowledge in these areas.

PERIODIC INSPECTIONS

Question. My bill and the House bill will require periodic inspections every five years. Will your rule require mandatory periodic inspections? If not, what mechanism will be in place to ensure that we are relying on more than the industry's own self-interest?

Answer. Shortly, the Department will issue a rulemaking which will establish requirements for periodic testing. This rule will incorporate by reference a national consensus standard which identifies specific enforceable standards for the interval for internal inspection, repair criteria, and mitigation measures such as extra valves. The Department is concerned that a five year interval may result in some lines being tested too frequently. And it may be desirable to test some lines more often. Indeed through administrative action, the Department has required pipeline companies to test as frequently as every six months to a year. Similarly, the condition and nature of other lines does not merit testing as frequently as every five years, and we would prefer that safety resources be devoted to other more important activities.

CERTIFICATION

Question. Why don't you think it is feasible to have individual federal certification and testing of operators? It is feasible in the airline industry where the FAA determines the capabilities of individual employees who work on aircraft.

Answer. To be done properly, individual federal certification and testing of pipeline employees would be extremely costly. We believe that worker qualification will be achieved more effectively and efficiently by implementation of the operator qualification rule which we issued last year. To be qualified, an individual must be able to demonstrate the ability to successfully and consistently perform the task. Regulators will be looking to the operator to show how individuals performing covered tasks have been evaluated to ensure they are qualified.

OPS expects testing and certification to be a major way in which operators demonstrate that an individual is capable of safely and effectively performing a covered task. However, the testing and certification will be done under established national certification programs in the private sector rather than by creation of a new Federal program.

RESEARCH AND DEVELOPMENT TECHNOLOGY

Question. What types of research and development is OPS undertaking to better the level of inspection technologies?

Answer. We are completing a $3.1 million research contract which commenced in June 1996 to identify and characterize pipeline mechanical damage by advancing magnetic flux leakage technology on an in-line inspection device, or "smart pig." This research was conducted under a Memorandum of Understanding with the Gas Research Institute (GRI). The research team of Battelle, Southwest Research Institute, and Iowa State University conducted the research. The laboratory work conducted under this research has revealed a multilevel magnetization signal is needed to fully characterize the two components of mechanical damage, which are the changes in pipe geometry and changes in the properties of the pipe metal resulting from mechanical damage. A procedure to distinguish the difference using the multiple magnetization level approach has been proven. The research team has also determined the effects of pipe stress and mechanical damage on the magnetic fields induced in the pipe wall by magnetic flux leakage "pigs" and has evaluated alternative methods of classifying and characterizing mechanical damage using neural networks and nonlinear harmonics. This work may allow a mechanical damage detection capability to be added to existing corrosion "pigs". In fact, a domestic "pig" vendor, Tuboscope Vetco Pipeline Services, is testing a prototype mechanical damage "pig" using data obtained as a result of this research.

At GRI's Pipeline Simulation Facility (PSF) near Columbus, Ohio, the research team upgraded the "pig" that serves as the Test Bed Vehicle (TBV) with state-of-the-art sensors, a new data acquisition system, and a more robust magnetizer system. The TBV has been used to gather data on mechanical damage defect sets in the 300-foot pull rig and in the 4700-foot pressurized flow loop located at the PSF.

A final report on the three-year research is being drafted and should be completed by the end of April. Once completed, it will be available on the Office of Pipeline Safety's Internet web site, http://ops.dot.gov.

The three-year research project was conducted with orientation of the magnetic field in the conventional direction along the longitudinal axis of the pipe. An fiscal year 2000 initiative will identify and characterize mechanical damage by conducting testing with the magnetic field in the pipe's circumferential direction. We expect completion by April 2002.

OPS has also requested funding for fiscal year 2001 to advance technologies for pipeline monitoring and pipe locating for broader use in protecting underground facilities. We expect to develop approaches to monitoring activity on the pipeline right of way so that excavation damage can be discovered in real time or near real time to preclude accidents from occurring. There is a range of emerging technologies for monitoring which can be used for prevention or detection of damage which deserve more research attention to advance their application to prevent pipeline failures. These would include use of acoustics, satellites and impressed current. We also have requested funding to identify and evaluate location equipment for buried plastic gas mains and services, develop performance criteria for improved generations of equipment with the desired locating capabilities, and investigate alternative ways to design plastic pipe so it can be more easily located.

REAUTHORIZATION BILL

Question. When do you plan on sending the Administration's pipeline safety reauthorization bill to Congress?

Answer. We will be sending the Administration's proposal shortly.

QUESTIONS SUBMITTED TO THE U.S. COAST GUARD

QUESTIONS SUBMITTED BY SENATOR BARBARA A. MIKULSKI

COAST GUARD YARD—CORE FACILITY

Question. I'd like to raise the issue of the Curtis Bay Coast Guard Yard with Vice Admiral Card. As you know, the Coast Guard Yard has played a vital role in ensuring the readiness of the Coast Guard fleet through the construction, repair, and renovation of both vessels and aids to navigation peculiar to the Coast Guard.

The Yard provides essential capabilities that are simply not available in commercial shipyards. Those capabilities include the Yard's instant response for emergency and non-emergency work, special ordnance and electronic repair expertise, instant ability to obligate funds without pre- and post-contract requirements and delays, and no-risk performance guarantees. Without the help of the Yard, the Coast Guard would be unable to maintain its fleet and therefore unable to meet its mission of saving lives.

Do you consider the Curtis Bay Coast Guard Yard to be a Core Logistics Facility?

Answer. Yes. In response to requirements outlined by the Coast Guard Authorization Act of 1988, the Secretary of Transportation provided a list of "essential logistics" activities. The Coast Guard Yard is on that list. The Yard remains an essential component to meet Coast Guard support requirements for our fleet.

COAST GUARD YARD POLICY STATEMENT

Question. If so, will you state that the Curtis Bay Coast Guard Yard is a Core Logistics Facility in the policy statement that is currently being developed by Headquarters?

Answer. Yes, the Coast Guard will reaffirm the essential nature of the Yard in our new policy statement. Over the past 100 years, the Yard has adapted to significant changes and challenges the Coast Guard has faced. The Yard's flexibility is a key component of its value to the Coast Guard. The Coast Guard continues to evaluate how the Yard can best meet the needs of the fleet and also lend its expertise to other government agencies. The Coast Guard's assessment in this regard is a continuous process and includes accounting for changes in its fleet size and opportunities for new business.

REFURBISHING USCGC MACKINAW

Question. Also, is the Coast Guard giving serious consideration to refurbishing the Great Lakes Icebreaker at the Curtis Bay Coast Guard Yard?

Answer. The Coast Guard intends to replace (not refurbish) Coast Guard Cutter MACKINAW with a new construction multipurpose icebreaker.

The Coast Guard has determined that a competitive procurement is the most appropriate strategy to achieve performance, cost, and schedule objectives. Market surveys conducted by the Coast Guard reflect significant commercial interest in this acquisition.

USCGC MACKINAW REFURBISHMENT DECISION TIMELINE

Question. When will the Coast Guard decide where the Great Lakes Icebreaker will be refurbished?

Answer. The Coast Guard intends to replace (not refurbish) Coast Guard Cutter MACKINAW with a new construction multipurpose icebreaker. The Coast Guard intends to award a commercial contract to design and build the Great Lakes Icebreaker during the third quarter of fiscal year 2001.

AIR–21 IMPACT

Question. Admiral Card, as you know, the Senate and the House currently are conferencing on the so-called AIR–21, the FAA reauthorization bill. One of the areas that remains unresolved is the issue of budgetary treatment for aviation programs. The House has proposed to create a firewall that would guarantee both trust funds

revenues as well as general tax revenues for aviation programs. What impact would the House's budgetary treatment proposal have on Coast Guard safety programs?

Answer. AIR–21 mandates large increases for FAA capital spending under the budget caps, making it more difficult to fund other discretionary programs, including the Coast Guard. Nevertheless, safety programs are a core mission which we will attempt to protect and we will continue to seek your support for the funding levels for the Coast Guard requested in the President's Budget.

QUESTIONS SUBMITTED TO THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

ADVANCED SIDE GLAZING

Question. Has NHTSA finalized its decade-long research of this technology, and if not, when can we expect its completion?

Answer. NHTSA is conducting additional research to address potential adverse safety effects that advanced glazing may cause. Specifically, this glazing might have durability problems, might make rescue more difficult by entrapping people in vehicles, and might increase head and neck injuries if it does not break out. To better judge the costs associated with advanced glazing, NHTSA is examining whether installing this glazing in windows without frames is feasible and cost beneficial. As a result of these concerns, NHTSA is currently conducting tests and performing further analyses to determine an appropriate test impact speed, to ensure repeatability of test procedures, and to evaluate selected impact points. This research is expected to be completed by the end of August of this year, at which time the agency will have sufficient information to arrive at a regulatory decision regarding ejection mitigation. However, with the new laminated window materials, the increased use of laminated side windows in Europe and Mexico, and a drive for harmonized world glazing standards, it is important that NHTSA continue research to provide objective analysis of the evolving safety opportunities and implications of advanced glazing. Furthermore, research will continue beyond August for studying entrapment issues, lacerations, and the revised costs associated with the newer ejection resistant glazing systems that will be introduced to the marketplace.

Question. What other projects is NHTSA working on that take precedence?

Answer. Ejection mitigation research is one of NHTSA's efforts with a high potential of large safety benefits. Consequently, this research has been fully funded and is underway. The side head air bag research is a parallel research program with the advanced glazing research program. Both of these research efforts are targeting the same potential benefit for reducing ejection likelihood.

Question. What is the status of testing advanced side glazing for head and neck impact injury?

Answer. Substantial work on evaluating the head and neck injury potential of advanced side glazing has been completed. The results and analysis from this effort are contained in the August 1999 status report. Additional analysis of head and neck injury is planned.

The dummy neck responses in the sled tests were not repeatable, especially for the tempered glass impacts. Therefore, an additional series of sled tests was performed, using tempered glass. The results from these tests are currently being analyzed, and additional testing may be required.

The level of door frame modification directly affects the occupant retention capability of advanced side glazings. The agency is, therefore, examining what effect that door frame modification has on head injury potential. The free-motion headform is being used to measure head responses from impacts into advanced side glazings mounted with differing levels of door frame modifications. This testing is currently underway.

These additional head and neck injury evaluations will be completed in August 2000.

Question. Does it make sense to implement side glazing standards while NHTSA pursues other more long-term research into preventing ejections and roll-overs?

Answer. The agency expects to complete its advanced side glazing testing in the fall of 2000. The agency will make its final decision once the advanced glazing testing is complete and agency staff have had the opportunity to review the results of the testing. At that point, the agency will be able to compare the relative merits and drawbacks of side glazing standards versus other technologies to prevent roll-over ejections.

SEATBELT USAGE

Question. Ms. Millman, has your agency shied away this goal?

Answer. NHTSA has not shied away from the goal of 85 percent seat belt use. While it is apparent that an 85 percent use rate is a very ambitious goal, steady progress is being made and we plan to maintain our vigorous approach to raising seat belt use rates nationwide. Two states, California and New Mexico, currently exceed 85 percent belt use. Eight other states, the District of Columbia and Puerto Rico, have use rates near 80 percent.

The agency has outlined a two-pronged approach to achieve a significant increase in seat belt use over the next year. This two-pronged approach requires NHTSA to (1) expand the scope of the Buckle Up America Campaign in all 50 states; and (2) focus on several opportunities including: states with high seat belt use rates, states with new primary laws, states with potential to increase belt use, and states likely to pass primary seat belt laws.

In addition to the two-pronged approach, NHTSA has also assisted the states financially with grant money authorized in the Transportation Equity Act for the 21st Century (TEA–21). TEA–21 authorized $500 million over the next five years in grants to encourage states to increase seat belt use rates. In November 1999, NHTSA awarded $54.6 million to 34 states, the District of Columbia, and Puerto Rico in incentive grant funds used for supporting programs that encourage seat belt use. In February of this year, NHTSA awarded 44 states, the District of Columbia, and Puerto Rico grants worth $25 million for innovative projects to promote increased seat belt use rates.

Also, Section 405 of TEA–21 calls for occupant protection incentive grants to be awarded to States that adopt and implement effective programs to reduce highway deaths and injuries resulting from individuals riding unrestrained or improperly restrained in motor vehicles. In fiscal year 1999, NHTSA awarded 43 states and territories $9.5 million in funding.

The combination of a two-pronged approach and grant money for the states should result in a substantial increase in seat belt use.

STATE SURVEY ON SEAT BELT USE

Question. I understand that the NHTSA has collected the latest state survey data regarding seat belt use. What does the data tell us that seat belt usage is increasing?

Answer. By March 1, 2000, all states, except South Dakota and Wyoming, submitted data from seat belt observation surveys conducted in 1999. South Dakota and Wyoming informed the agency that they had conducted no observational survey in 1999. New Hampshire submitted an observed use rate without an accompanying report, and informed the agency that the survey methodology they had employed was not in compliance with the uniform criteria developed by the agency for the Section 157 incentive grant program. The agency has not yet completed the technical review of the submitted reports to verify the accuracy of the reported usage rates. However, a preliminary analysis of the reported rates indicates the average of the states' usage rates for 1999, weighted by vehicle miles traveled, is approximately 70 percent, up approximately one percentage point from the weighted average for 1998.

Question. Considering that seat belt usage has remained essentially flat during the past four years, what new strategies is NHTSA intending to implement to achieve this goal?

Answer. The agency acknowledges that seat belt use has not grown much as we hoped. It is apparent that the 85 percent use rate is a very ambitious goal. NHTSA plans to maintain a vigorous approach to raising seat belt use rates nationwide. Two states, California and New Mexico, currently exceed 85 percent belt use. Eight other states, the District of Columbia and Puerto Rico, have use rates near 80 percent. The agency has outlined a two pronged approach to achieve a significant increase in seat belt use over the next year. This two pronged approach requires NHTSA to: (1) expand the scope of the Buckle Up America Campaign in all 50 states; and (2) focus on several opportunities including: states with high seat belt use rates, states with new primary laws, states with potential to increase belt use, and states likely to pass primary seat belt laws.

Question. Is the goal for 2005 to increase seat belt usage to 90 percent more realistic than the 85 percent goal?

Answer. The goals to reach 85 percent by 2000 and 90 percent by 2005 are both realistic. A primary reason that these goals can be met is the large amount of grant money that has become available under the Transportation Equity Act for the 21st Century (TEA–21). TEA–21 authorized $500 million over the next five years (beginning in fiscal year 1999) in incentive and innovative grants to encourage states to

increase seat belt use rates. In 1999, NHTSA awarded $54.6 million in incentive grants to 34 states, the District of Columbia, and Puerto Rico. The grant funds will be used to support highway safety programs, including those encouraging seat belt use and special traffic enforcement programs. In addition, funds have been awarded to States to carry out innovative projects to promote increased seat belt use rates. In fiscal year 2000, 44 states, the District of Columbia, and Puerto Rico have been awarded grants worth $25 million. Also, under Section 405 of TEA–21, the legislation calls for a second occupant protection incentive grant program to reduce the number of Americans riding unrestrained in motor vehicles. In fiscal year 1999, 43 states and territories received $9.5 million to increase belt use.

To assist the states in implementing their new program efforts and to insure that national goals are met, the agency has outlined a two-pronged approach to achieve a significant increase in seat belt use. This two-pronged approach requires NHTSA to: (1) expand the scope of the Buckle Up America Campaign in all 50 states; and (2) focus on several opportunities including: states with high seat belt use rates, states with new primary laws, states with potential to increase belt use, and states likely to pass primary seat belt laws.

QUESTIONS SUBMITTED BY SENATOR BEN NIGHTHORSE CAMPBELL

ROLE OF THE NTSB IN THE AIR BAG TEST DECISION-MAKING PROCESS

Question. Could you please tell me what role the NTSB plays in your decision-making process? Aside from the statistics and recommendations provided from the NTSB, on what other input do you rely?

Answer. The NTSB interacts with NHTSA both informally and formally on scientific and policy levels. Informally, respective staff members coordinate activities on technical issues, exchange ideas, and share crash investigation results. The automotive safety information exchange benefits all participants in the decision making process. On a more formal basis, NHTSA attends numerous NTSB hearings and briefings to learn more about NTSB's investigations of automotive safety. NHTSA also carefully considers any comments submitted by the NTSB to our formal rulemaking dockets. Periodically (usually annually), the NTSB issues a series of recommendations designed to shape NHTSA's rulemaking strategies. NHTSA replies to the NTSB's recommendations in writing, either providing reasons for implementing the recommendation, or informing the NTSB that an alternative approach may more effectively attain the stated objective. The NTSB's recommendations, together with NHTSA's responses, represent an iterative process that concludes only when the NTSB determines that a specific recommendation is "Closed—Acceptable Response." More often, NHTSA's actions in meeting the NTSB's recommendations are rated as "Open-Acceptable Response," or "Open—Acceptable Alternative Action," simply because most regulatory actions are of long duration. In summary, NHTSA benefits from NTSB inputs to NHTSA's automotive engineering knowledge and in mutual efforts to improve Federal Motor Vehicle Safety Standards by:

—attending NTSB conferences, symposia and safety hearings;
—responding to NTSB recommendations for improving automotive safety;
—reviewing NTSB formal comments submitted to our rulemaking dockets;
—participating informally with NTSB staff to advance safety performance standards.

Question. Since the NTSB cannot make any regulations, and can only provide recommendations for safety improvements, what recourse is there if their data and recommendations are in dispute with your new rule?

Answer. NHTSA and the NTSB both believe transportation safety is the number one goal of our efforts. On those occasions when there are reasonable differences, NHTSA and the NTSB openly share technical reports and supporting data so that both entities are well aware of the other's position. NHTSA respects and always weighs the NTSB's opinions as extremely significant.

If the NTSB continues to disagree with an NHTSA decision, the NTSB can and does re-address its opinions and concerns to NHTSA and the Secretary of Transportation. NHTSA has found that the inputs of the NTSB are informative and add value to the deliberations. For example, in a recent significant rulemaking, NHTSA specifically solicited the NTSB's comments and delayed deliberations when agency staff noted the NTSB's comments were absent at the end of the open comment period. The NTSB did provide comments shortly after the deadline, and the comments were considered. In general, when there is a substantive disagreement, NHTSA frequently conducts scientific tests and analyses to reinvestigate the NTSB's assumptions and conclusions.

However, in making decisions that concern ongoing rulemaking actions, NHTSA relies on its knowledge of advanced automotive engineering and test results acquired at NHTSA's test facilities. Moreover, NHTSA is required by law and executive orders to consider additional factors in decision making that are not required of the NTSB.

Question. Has NHTSA looked into the recommendations of the NTSB? Do you plan on issuing a rule such as the one proposed?

Answer. NHTSA requirements regulate new vehicles that carry 11 or more persons that are sold for transporting students to or from school or school related events. Those vehicles are required to meet all Federal Motor Vehicle Safety Standards (FMVSS) for school buses. The FMVSSs applicable to school buses require that school buses have safety features over and above those of other passenger vehicles. Under 49 U.S.C. 30101, et seq., a vehicle is regarded as being sold for use as a school bus if, at the time of sale, it is evident that the vehicle is likely to be significantly used to transport students to or from school or school related events. This statute applies to school buses sold to public as well as parochial schools. Thus, a dealer selling a new 15-passenger van to be used for school transportation must ensure that the van is certified as meeting our school bus FMVSSs. Again, NHTSA regulations can only apply to the manufacture and sale/lease of new vehicles. Each State prescribes its own regulations that apply to the use of any vehicle that is used to transport students. It has been a long standing agency policy that school buses be used to transport school children to and from school or an event related to school.

NTSB did not make any safety recommendation on this subject to NHTSA. The safety recommendation from NTSB went to the governors of all 50 states and the District of Columbia. The safety recommendation asked that the jurisdictions that have the authority to regulate the type of vehicles that are used for school transportation, require that those vehicles carrying more than ten passengers (buses) and transporting children to and from school and school related activities (including but not limited to, Head Start programs and day care centers) meet the Federal school bus safety standards.

REGULATIONS ON HOW FAR/LONG VANS MAY BE DRIVEN

Question. I also understand that unlike those rules governing commercial bus drivers, no regulations exist covering how far or how long vans may be driven. Is this an area of concern for NHTSA? Does NHTSA have any plans to address this issue?

Answer. Safe transportation is always a concern of NHTSA. The agency has advocated through our traffic safety program the effects of fatigue and other conditions that impair a person's ability to drive a motor vehicle safely. However, NHTSA does not have the authority to issue regulations regarding how far or how long vans can be driven. Currently, the States have authority to issue regulations regarding how vehicles are used. Federal requirements pertaining to this type of regulation come under the jurisdiction of the new Federal Motor Carrier Safety Administration.

ROLLOVER COUNTERMEASURES

Question. With the increasing popularity of SUV's, rollover crashes are becoming more frequent and a more significant injury/fatality statistic. Some domestic auto manufacturers have already gone on record with plans to install rollover countermeasures in the near future. How does DOT/NHTSA propose to address this issue? For example, does the government plan to require these types of systems for rollover protection.

Answer. NHTSA has been conducting tests and studying the issue of rollover for several years. Both static stability tests and dynamic rollover tests have been conducted since 1997. In July 1999, the agency published a report on the results of the rollover research program. The agency has developed, and plans to issue within a short time, a Request for Comments on a Consumer Information Program giving rollover risk ratings for passenger cars and light trucks, in lieu of rulemaking at this time. NHTSA also intends to continue its dynamic rollover research program, and to evaluate any rollover countermeasures that might be developed.

AUTOMOTIVE SAFETY FOR AN AGING POPULATION

Question. The aging of the baby-boomer generation raises significant(ly the) population of imminent elders. Older people are more susceptible to injuries and fatalities. As the baby-boom generation ages, (the) sheer number of this population segment (will) heighten the importance of this issue. At present, occupant protection strategies are focused on younger adults. What do the government regulatory bodies intend to do to address automotive safety for an aging population?

Answer. Secretary Rodney Slater has indicated the high priority he places on this issue, and his desire that the Department undertake additional initiatives to assure continuing safe transportation for older adults. NHTSA, the Federal Transit Administration, and the Federal Highway Administration have numerous projects underway that will contribute to meeting the challenge of preparing the transportation system to accommodate this rapidly growing segment of society.

NHTSA is pursuing several approaches in its efforts to protect older drivers and passengers of motor vehicles. NHTSA is looking at a range of safety issues involving older occupants of vehicles, from ways to help them avoid crashes (e.g. regulatory changes to reduce headlighting glare) to ways to protect them from injury when crashes do occur. The current state of crash dummy development already provides a level of instrument calibration that allows us to address the particular susceptibilities of older individuals. NHTSA expects older occupants to benefit from air bag improvements, including dual stage systems, resulting from the current agency rulemaking on advanced air bags.

Other agency activities include collaboration with the Centers for Disease Control and Prevention and the National Institute on Aging to update the transportation research and development requirements for the elderly for the next 25 years. This research plan will be published by the Transportation Research Board this year. NHTSA also is working with the AAA Foundation for Traffic Safety and the Eno Transportation Foundation to initiate a national dialogue on the transportation needs of older adults and to devise solutions where problems are found.

In addition, NHTSA is examining several new technologies as part of the Intelligent Transportation System (ITS) Intelligent Vehicle Initiative (IVI), to help older drivers avoid crashes. These technologies have the potential to help meet the special needs of older individuals—needs such as slowed reactions, sensitivity to glare, and a narrowed field of view. Among the in-vehicle technologies the agency is examining are collision warning and near-object detection systems for backing and lane changing, night vision enhancement, forward collision avoidance systems, and intelligent cruise control.

MODIFICATION OF THE DEFORMABLE BARRIER

Question. The Federal Motor Vehicle Safety Standard (FMVSS) 214 moving deformable barrier test is configured to represent a typical passenger vehicle. Significant increases in SUV purchases, however, indicate a potential need to modify the deformable barrier to better represent real-world vehicle crash scenarios. Are there plans to do so to more accurately reflect this shift in the automotive population?

Answer. On July 2, 1998, Advocates for Highway and Auto Safety (Advocates) submitted a petition for rulemaking requesting that FMVSS 214,"Side Impact Protection," be upgraded. In its petition, Advocates indicated that the requirements of FMVSS 214 are insufficient to provide adequate protection to occupants of passenger cars and small LTVs when their vehicles are struck on the side by larger, heavier and more aggressive vehicles. Advocates argued that the moving deformable barrier (MDB) of FMVSS 214 is not high/heavy enough because the MDB was originally designed in 1988 for a vehicle fleet that was projected to be lighter and smaller than the current vehicle fleet population. Advocates also argued that the test dummy of FMVSS 214 should be replaced with the EuroSID–1 dummy which has more measurement capability. The petitioner recommended that FMVSS 214 be amended to a higher safety performance level so that superior side impact air bags would be developed and installed in vehicles as standard equipment. The agency granted the Advocates' petition because the current NHTSA's research plan on side impact protection will fully address the issues in the petition.

The agency delivered a second Report to Congress in June 1999 on the rulemaking status of FMVSS 214. This Report to Congress contained current results and the agency's research plan. With respect to the impact barrier (MDB) upgrade, the agency initiated a crash data analysis using 1988–1997 NASS/CDS data to characterize the current and future side impact crash environment in the United States. The study addresses issues concerning vehicle involvement, occupant exposure, and incidence of casualties with special emphasis on determining the mechanisms of injury. Recognizing the growing population of light trucks in recent years, the agency plans to re-examine the current MDB weight, geometry, and stiffness.

The agency started the research needed to make the deformable barrier more representative more than a year ago. NHTSA plans to finish this research within two years and propose any appropriate changes to the barrier then.

QUESTIONS SUBMITTED BY SENATOR FRANK R. LAUTENBERG

STATE DATA PROGRAM

Question. Your budget request for the State Data Program is for $3.024 million, the amount enacted for fiscal year 1999 and a $600 thousand increase over the current fiscal year funding.

Why is the increase needed?

Answer. In fiscal year 2000, the State Data Program request was cut $600 thousand from the requested level to comply with an overall limitation in the Research and Analysis budget. Consequently, the amount of funding available for implementing new Crash Outcome Data Evaluation System (CODES) grants and the new CODES Data Network grants was reduced. The additional funding requested for fiscal year 2001 will permit 4 grants to new CODES states to be awarded, new CODES Data Network grants to be awarded to the remaining qualified CODES states, and second year funding to the states that were awarded Data Network Grants in fiscal year 2000.

USE OF STATE DATA FUNDS

Question. Since there are only 2 NHTSA employees assigned to this program, provide a breakdown of the uses of the funds expended in fiscal year 1999, fiscal year 2000 to date and the anticipated uses of the fiscal year 2001 funds?

Answer. The following table shows the breakdown of spending in the State Data Program area for fiscal year 1999 and anticipated spending for fiscal year 2000 and fiscal year 2001.

[In thousands of dollars]

Spending area	Fiscal years—		
	1999	2000	2001
17 State Data System Operation and Analysis	$177	$195	$260
State Data Electronic Collection Project	308	n/a	n/a
Model Minimum Uniform Crash Criteria (MUCC) Support Development/ Implementaion	89	120	85
New CODES/Other CODES Grants	2,245	950	1,350
CODES Data Network	n/a	795	1,015
CODES Contractual Support	205	284	314
TOTAL	3,024	2,344	3,024

STATE ELECTRONIC FILES

Question. Your justification states that state electronic data files containing data on crashes are used by NHTSA and that during fiscal year 2000 you are obtaining data from 17 states. Has NHTSA experienced any resistance to obtaining state electronic files and, if so, what is being done about it?

Answer. Most of the 17 states in NHTSA State Data System have willingly provided NHTSA with copies of their electronic crash data files. NHTSA is an extensive user of state crash data and often provides feedback to the states that results in improving crash data or crash systems. Some states, however, have been concerned that NHTSA may have to provide their data to groups outside of the agency and that the data may be misused. Consequently, NHTSA treats state crash data as belonging to the originating state and will not release any of the 17 state crash data files in the State Data System to outside groups without the outside group first obtaining permission from the state. This policy has alleviated state concerns.

STATE DATA COLLECTION UNIFORMITY

Question. Is it essential that states participating in the crash data collection and analyses program collect data in a uniform manner and use a standard means of recording and accessing the data? If so, do the 17 states targeted for the program meet those requirements and, if they do not, what is NHTSA doing to assure uniformity?

Answer. It is not essential that the 17 states in the State Data System be uniform in the collection and processing of state crash data. NHTSA has made use of the crash data from these states in numerous analyses and evaluations. Specific data elements collected by only some states are valuable for particular issues. However, non-uniformity in the elements collected, and in their definition, does complicate NHTSA analyses and prevents combining of state databases into larger sets for analytical purposes. Caution must be exercised when performing analyses and interpreting results.

Uniformity in the collection and recording of crash data, if adopted by states, would assist all levels of users. The advantages of uniformity include: improved interstate comparisons and analyses; enhanced decision making for targeting resources, implementing performance measures, and evaluating program effectiveness; the ability for states to learn from each other by sharing their information, identifying their common problems and working together on joint program priorities; and development of common software for crash data entry.

At the national level, uniform state data would ease the potential analytical issues NHTSA experiences when dealing with non-uniform databases. Also, the collection and coding of information in NHTSA data systems, including the 17 State Data System would improve, possibly leading to further revisions and economies in how the data are collected.

In 1998 NHTSA, in cooperation with the Federal Highway Administration (FHWA), the National Association of Governors Highway Safety Representatives (NAGHSR), and the highway safety community in general, developed a standardized list of data elements to be collected on motor vehicle crash reports, the Model Minimum Uniform Crash Criteria (MMUCC). Currently NHTSA, also in cooperation with FHWA and NAGHSR, is encouraging the adoption of MMUCC by the states.

Question. Is the State of Maryland collecting and formatting data in a manner that could be used as a model by the other states? If so, what is NHTSA doing to encourage the use of the Maryland system?

Answer. The Maryland crash report was most recently revised in the early 1990's and, therefore, does not include all of the data elements recommended in the Model Minimum Uniform Crash Criteria (MMUCC). Consequently, it cannot be recommended as a model for other states.

NHTSA is cooperating with the Federal Highway Administration (FHWA) and the Iowa Department of Transportation (IDOT) to develop the National Model, a suite of software which includes electronic versions of the Iowa police crash report, the electronic form that started the effort, as well as commercial vehicle inspection reports, drunk driving reports, and incident reports. The forms all share data among the applications, eliminating the need to enter data more than once. Full use is made of pen computers, portable printers, bar code readers, digital cameras, global positioning (GPS), and Geographical Information Systems (GIS) to streamline data entry and reduce data collection burden on police officers. Data can be electronically uploaded to a central repository in the IDOT. Iowa is currently revising its crash report and will be basing the revision on MMUCC. NHTSA is funding the IDOT to incorporate MMUCC into the electronic crash form of the National Model and, when completed, will encourage the adoption of the National Model by other states.

COLLECTION AND ANALYSES OF CRASH DATA

Question. How will NHTSA coordinate with the Federal Motor Carrier Safety Administration regarding the collection and analyses of crash data involving motor carriers?

Answer. Two separate activities requiring NHTSA/FMCSA coordination were mandated by Section 225 of the Motor Carrier Act of 1999. The first is the development and implementation of a truck crash causation study. The second is the planning, development, and implementation of a continuous crash data collection activity that will be used to support the FMCSA's enforcement and analyses efforts.

Working groups, consisting of representatives of both agencies, have been established to identify the needs and requirements of these efforts. We recognize that the continuous involvement of both agencies is critical to the success of this activity.

QUESTION SUBMITTED BY SENATOR BARBARA A. MIKULSKI

AGGRESSIVE DRIVING

Question. What is the status of the $1 million earmarked for fiscal year 2000 for Maryland's aggressive driving program? What do you think about states implementing laws that make aggressive driving a crime?

Answer. NHTSA has been working with the Maryland Motor Vehicle Administration (MD MVA) to award the $1 million earmarked for the Maryland Aggressive Driving program. MD MVA submitted its program proposal on February 28, 2000 to use these funds for a Public Information and Education (PI&E) program to pay for radio spots, newspaper advertisements, print and public service announcements (billboards, road signs, brochures), hold a symposium to announce the PI&E campaign and the other components of the program, and send out letters and leaflets. NHTSA expects soon to award the grant to the MD MVA.

The need for new laws to address the aggressive driving problem varies from state-to-state. The Department of Transportation sponsored a legal symposium in January, 1999, that brought together representatives from the judiciary, prosecution, defense bar and law enforcement communities to discuss the legal issues associated with aggressive driving and the need for new aggressive driving laws. While no consensus was reached, the participants felt that each state should examine its current statutes to determine their adequacy in dealing with the aggressive driving problem. Some states may have no need for new laws, while others, particularly those with weak reckless driving statutes, may have a need for new statutory approaches.

An Aggressive Driving Implementation Team was formed following the Symposium to work towards more fully developing and implementing the ideas brought forth at the symposium. The team is made up of judges, prosecutors, a defense attorney, and law enforcement executives and is charged with developing a National Action Plan to reduce aggressive driving by the end of 2000. They are also addressing the need for new laws.

NHTSA is concerned that some aggressive drivers may not be adequately identified and sanctioned in some states under current laws. For example, in situations where drivers commit multiple moving violations, in some states law enforcement officers can only write a single violation on a ticket, some judges may convict on only one violation when multiple charges are filed, and, in many states, offenders can pay a fine by mail that will not result in any notation on their record that they were guilty of aggressive driving. Thus, there may be a need for some means of identifying drivers who engage in aggressive driving so that judges can deal with them appropriately, particularly for subsequent similar offenses. All states should have laws that provide for enhanced sanctions for aggressive driving (rather than the current penalties for simple moving violations). Statutes must be tough enough to allow conviction on each and every traffic violation observed. Sanctions should include points for repeat offenders.

QUESTIONS SUBMITTED TO THE FEDERAL RAILROAD ADMINISTRATION

QUESTION SUBMITTED BY SENATOR RICHARD C. SHELBY

ACTIONS IN PREVENTING TRESPASSER FATALITIES

Question. The story you tell on grade crossing accidents is a good one—the number of grade crossing accidents on the general railway system has been reduced by 28 percent from 1993 through 1998. However, trespassing accidents and fatalities involving pedestrians in crossings and elsewhere on railroads' properties have not been reduced, and are now the leading cause of railroad fatalities. Trespassing is a complicated problem and is difficult to address. Over the last six years, the number of railroad trespassing fatalities has averaged 514 a year. A specific difficulty is that some of these pedestrian fatalities—perhaps as much as 40 percent, according to some government and railroad authorities—are suicides. What actions do you think the FRA can take to address prevention? Are taxpayers likely to get as good a "bang for the buck" on these efforts as they would on grade crossing safety efforts?

Answer. Trespassing is a complicated problem and one that is much more difficult to address than grade crossing safety since trespassing acts occur on private property. FRA believes some of the same strategies that work for grade crossing safety can also work for trespass prevention. Education is key and FRA will not only continue but increase its education programs. FRA is working with Operation Lifesaver, Inc. (OLI), to develop PSA's that will address grade crossing safety and trespass prevention. Focus groups will be convened in Los Angeles, New Orleans and Chicago to help determine how the PSA's resonate with the public and they will be revised to be responsive to the public.

FRA has also worked with law enforcement agencies and local communities to develop and implement strategies and technologies for trespass detection on railroad right-of-ways and a system of immediate reporting to law enforcement officials to

effect apprehension and/or removal of a trespasser. FRA, OLI and the railroad industry have, in partnership, developed a Trespass Abatement Guide that will help communities identify strategies to prevent trespassing on railroad right-of-ways.

Implementation strategies become much more effective if either locations where trespassing occurs are targeted or demographic targets can be established. To help focus on trespass abatement initiatives, FRA and OLI have scheduled a working group meeting of professionals to determine how demographic data can be collected to assist with targeting those groups most likely to be involved in trespassing and identifying their reasons for doing so. By collecting this data FRA can tailor existing strategies to be more effective in reaching targeted audiences.

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

FISCAL YEAR 1998–2000 GRADE CROSSINGS FUNDS UNDER SECTION 130

Question. Administrator Molitoris, TEA–21 increased amounts for existing safety related programs and included new safety-related programs. TEA–21 continues to set-aside funding from FHWA's surface transportation program for railway-highway crossings, which has resulted in a funding increase for this program. How much funding (obligational authority) was available for the railway-highway crossing program under section 130 of title 23, U.S.C for fiscal years 1998, 1999 and 2000?

Answer. The obligational authority available for the highway-rail grade crossing program under section 130 of title 23, U.S.C., for fiscal years 1998, 1999 and 2000 is as follows:

Fiscal Year	
1998	$154,362,968
1999	154,767,190
2000	154,929,630

To put these figures in context, these amounts would pay for gates and lights at approximately 1,000 highway-rail crossings each year ($150,000 per crossing).

NEW MEXICO 130 GRADE CROSSING FUNDS

Question. How much obligational authority was available for New Mexico for section 130 of title 23, U.S.C for fiscal years 1998, 1999 and 2000?

Answer. The obligational authority available for the State of New Mexico for the highway-rail grade crossing program, under section 130 of title 23, U.S.C. for fiscal years 1998, 1999 and 2000 is $1,205,846 per year.

130 OBLIGATIONS FOR NEW MEXICO

Question. How much did New Mexico obligate in 1998 and 1999 for section 130 projects?

Answer. The State of New Mexico obligated $1,004,951 in fiscal year 1998 and $967,190 in fiscal year 1999 for section 130 projects.

EFFORTS USED TO REDUCE GRADE CROSSING ACCIDENTS

Question. Administrator Molitoris, I understand that incidents at the 259,000 highway-rail grade crossings have decreased by 37 percent from 1993 levels. I am encouraged by these results. I agree with you, however, that more work needs to be done to reduce the fatalities level well below the current level of about 400. In your view, what is the most significant program or effort that has contributed to the 37 percent reduction in fatalities?

Answer. No single program, initiative or effort can lay claim to being the most responsible for the recent successes in this area. Rather, it has been the partnership of the Federal Railroad Administration (FRA), Federal Highway Administration, National Highway Traffic Safety Administration, Federal Transit Administration, National Transportation Safety Board, Operation Lifesaver, Inc. (OLI), railroad labor, railroad management, the railroad supply industry, Amtrak, the American Trucking Association, the school transportation industry (bus drivers), and law enforcement agencies that have contributed to that success.

One program initiative warrants special mention, but not to the exclusion of the significant partnership efforts previously mentioned. In 1994, the FRA filled eight positions in order to concentrate efforts on highway-rail grade crossing safety and trespass prevention. These eight Highway-Rail Grade Crossing and Trespass Programs Regional Managers have been able to leverage Federal participation in grade crossing safety and significantly increase the number of safety initiatives within the

Department to reduce fatalities. They have also been catalysts for increasing the number and focus of national grade crossing safety initiatives at the community level. They have done so by facilitating existing and creating new partnerships, and initiating special safety programs at the state and community level. In the five-year period since the establishment of the Grade Crossing and Trespass Programs Managers's positions, the rate of crossing safety improvements accelerated by 33 percent when compared to the five-year period preceding the establishment of those positions. Their efforts have been so successful that eight Assistant Highway-Rail Grade Crossing and Trespass Programs Regional Managers were hired in 1999 to further develop this program.

QUESTIONS SUBMITTED BY SENATOR BEN NIGHTHORSE CAMPBELL

PURPOSE OF FULL-SCALE PASSENGER RAIL CAR CRASH TESTS

Question. I am aware that the Federal Railroad Administration (FRA), in conjunction with a number of other entities, has recently conducted a full-scale passenger rail car crash test at the Transportation Technology Center in Pueblo. Can you tell me the purpose of this test, and whether or not it was a success?

Answer. The test conducted on November 16, 1999, was the first in a series of full-scale passenger rail car crash tests. The purpose of the test program is to collect engineering data to validate analytical tools and procedures used in the safety assessment of passenger rail equipment. The test was very successful. In addition to the large amount of data on the structural deformation of the rail vehicle as the car crushes, FRA was also able to measure the vertical and lateral motions of the car during the test, and the influence of these car motions on the responses of the Anthropomorphic Test Devices (test dummies) in three different interior seating configurations. The information from this test is being used to modify the passenger seats for the next test.

PURPOSE OF SECOND PASSENGER RAIL CAR CRASH TESTS

Question. I understand another full-scale crash test is scheduled for April 4. What do you hope to learn from that test?

Answer. In this test, two coupled passenger cars of the same design will be crashed into a rigid barrier. In addition to measuring the crush response of the cars and the influence of these car motions on the test dummies, the interactions between the coupled cars will be measured. These interactions could lead to lateral buckling of the train during a collision, and/or the override of one car onto another. The cars are expected to start buckling out laterally during the test, with approximately two feet of misalignment at the coupled ends of the cars. Modifications have been made to the mountings to be used in the commuter seat interior arrangement. These modifications are relatively minor, but should increase the strength sufficiently to prevent failure of the seat mountings in this test. With the seats performing as intended, the influence of the vertical and lateral carbody motions on the test dummies can be observed.

NEED FOR FUTURE RAIL CAR CRASH TESTS

Question. How many additional tests will be required to obtain the data necessary to enhance passenger rail safety? It is my understanding that the initial tests are designed to establish a simple baseline and that subsequent tests will need to be of a more complex nature to adequately represent real accidents. Is this an accurate characterization of the program objectives?

Answer. That is an accurate characterization of the program. Beyond the test scheduled for April 4, 2000, 10 additional tests are currently planned for a total of 12 tests. The first four tests characterize current typical passenger rail equipment in a head-on collision:

—Single-car test into a rigid barrier (the November 16, 1999 test)
—Two-car test into a rigid barrier (planned for April 4, 2000)
—A cab car-led train colliding head-on with a locomotive led train (planned for November, 2000)
—A cab car-led train colliding with a cab car-led train (planned for March, 2001)

The next four tests are to evaluate the effectiveness of improved equipment in a head-on collision. The improved equipment includes crushable end structures, a crashworthiness strategy known as crash energy management. These "crush-zones" act to distribute the crush among all the cars in the train and to limit the decelerations of the cars during a collision. For the current strength-designed cars, nearly all the damage occurs to the cars closest to the impact, often with significant loss

of occupied space, while there is little damage at all to the cars away from the impact. These tests are intended to measure the increase in occupant protection afforded by passenger rail cars with crash energy management.

Two additional tests are intended to characterize the current equipment in oblique collisions, such as the accident in Secaucus, New Jersey in February, 1996. They include a cab car-led train colliding at a switch with a locomotive-led train and a cab car-led train colliding at a switch with a cab car-led train.

Finally, two tests are planned to characterize the effectiveness of improved equipment in an oblique collision. The leading cab cars will incorporate integrated end structures. All the elements of the end structure of the cab car will be integrated such that when one portion of the structure is impacted, the entire structure will help support the load. This integration significantly increases the strength of the end structure, and helps control the crushing of the end structure.

FUNDING FOR FULL-SCALE PASSENGER RAIL CAR CRASH TESTS

Question. What has the FRA requested for the crash test of passenger rail cars in fiscal year 2001? What will be accomplished with this level of funding? What portion will be devoted to occupant protection issues? Is additional funding required to adequately cover the necessary occupant protection tests, in addition to the tests on the rail cars themselves? Shouldn't the top priority of the FRA be passenger safety and occupant protection?

Answer. A total of $2.2 million is requested for the crash test of passenger rail cars in fiscal year 2001. With this level of funding, FRA plans to conduct two crash tests of passenger rail cars with improved crash energy management design. These single-car and two-car tests will be conducted with the fixed barrier at the TTC facility in a similar manner like the first test last November.

Depending on the cost of structural modification to the rail vehicles to incorporate the crash energy management design, less than half the funds are planned to support the occupant protection portions of the tests. The remaining funds are required to implement the structural portion of the tests. Additional funds may be required to analyze the test data for both the occupant protection as well as the structural portion of the tests. As more test data becomes available, plans may be modified to investigate the most effective means to protect the passengers.

It is important to note that all aspects of the testing are designed to improve our understanding of how best to protect occupants. The term "occupant protection" is also used above in the narrower sense in reference to issues of compartmentalization and occupant restraint.

TESTS AT TTC

Question. Will these tests continue to be conducted at TTC in Pueblo?

Answer. Yes, TTC is the ideal facility for conducting these tests. It has the rigid barrier with sufficient size and appropriate track for the single-car and two-car test, as well as the appropriate space and track for the train collision tests.

OTHER RAIL CAR CRASH TESTS

Question. What other rail crash tests could be undertaken? Specifically, what is the relationship between the current series of passenger rail tests and commuter rail travel? Did the recent commuter rail crash in England shed any light on the types of systems that might be employed to protect occupants?

Answer. Other full-scale rail crash tests could be undertaken to evaluate the effectiveness of occupant protection strategies during derailment and during grade crossing collisions.

The FRA will use the results of the current series of passenger rail tests in its second phase of rulemaking to enhance the safety standards for commuter passenger safety. Currently, the FRA requires commuter and intercity rail passenger seats to support the load associated with an impact from an unrestrained occupant. Based on the test results and other information, the addition of occupant injury criteria to this requirement may be considered along with a reevaluation of the impact conditions prescribed in the rule. The test results are also expected to be useful in considering the application of seatbelts, crash energy management systems and other improved structures for better passenger safety.

The recent commuter rail crash in Ladbroke, England showed that the issue of structural damage of aluminum-bodied rail cars as well as fire safety and emergency responses should continue to be examined in safety research.

QUESTIONS SUBMITTED TO THE NATIONAL TRANSPORTATION SAFETY BOARD

QUESTION SUBMITTED BY SENATOR PETE V. DOMENICI

AVIATION RUNWAY INCURSIONS

Question. Chairman Hall, as you mentioned in your testimony, aviation runway incursions have been increasing. In fact, the 1998 level of 325 incursions represents an increase of 11 percent over the 1997 level. The National Transportation Safety Board as well as the Inspector General and the General Accounting Office have consistently identified runway incursions as a problem for many years.

Although the FAA has made some progress in addressing runway incursions, the Inspector General recently stated that FAA may not meet its goal to decrease these incidents.

Why has the FAA had problems addressing runway incursions?

Answer. The Federal Aviation Administration (FAA) has not managed this program as effectively as anticipated. The FAA's managers of the runway incursion program changed often, and the program did not appear to receive adequate support from top management. In response to Safety Board recommendations dating back to 1991, the FAA indicated that its solution to the runway incursion problem was the Airport Movement Area Safety System (AMASS).

AMASS, designed to operate in conjunction with Airport Surface Detection Equipment–3 (ASDE–3) surface radar systems, is behind schedule. Although it is currently being installed, it is still not operational nine years after the FAA began working on the project. In addition, some tower facilities, such as Ronald Reagan Washington National Airport, will experience further delay in the operational use of AMASS because ASDE–3, which is designed to provide tower air traffic controllers with position information on all aircraft and vehicles operating on airport runways and taxiways, has not yet been commissioned. In addition, AMASS is scheduled to be installed at only 34 of the busiest airports nationwide, leaving other airports with substantial air carrier traffic without any automated assistance in preventing surface incidents. Further, the FAA recently stated that AMASS will not do all it was originally intended to do, and can only be considered a start on addressing the problem.

Question. What is the major barrier facing FAA in achieving its goal of reducing runway incursions to 248 or less in 2000?

Answer. On August 12, 1991, the FAA stated that its solution to reducing runway incursions was the development of the AMASS designed to alert controllers to pending runway incursions at all terminal facilities scheduled to receive the ASDE–3. However, discussions with the FAA reveal that the AMASS will not detect runway incursions but may possibly prevent runway collisions in certain circumstances.

Because it is not providing any new technological means that will help to reduce runway incursions, the FAA is now focusing on pilot education and increased awareness of the runway incursion problem. In October 1999, the FAA created the Runway Safety Program, which has instituted several education and awareness programs to do that. The number of incursions has not reduced significantly—from 325 in 1998 to 322 in 1999—and more must be done to ensure the number of incursions does not increase, let alone reduce the number to 248—the FAA's stated goal.

Question. In your opinion, is the problem related to funding?

Answer. Congress has provided more than $380 million over the years in funding for runway incursion projects. Although this figure seems generous, the Board has not studied the funding issue. We are aware, however, that the Department of Transportation Inspector General's office has twice reviewed FAA's runway incursion program.

SUBCOMMITTEE RECESS

Senator SHELBY. This hearing of the Transportation Appropriations Subcommittee is now recessed. We are scheduled to meet next week, Thursday, March 2, in Dirksen 192 at 10:00 a.m. to hear about States' experiences in implementing the Drivers Privacy Protection Act.

[Whereupon, at 11:50 a.m., Thursday, February 24, the subcommittee was recessed, to reconvene at 10 a.m., Thursday, March 2.]

DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

THURSDAY, MARCH 9, 2000

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:02 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Richard C. Shelby, (chairman) presiding.

Present: Senators Shelby, Gorton, Bennett, Lautenberg, and Kohl.

OVERSIGHT HEARING ON DEPARTMENT OF TRANSPORTATION PROGRAMS—FISCAL YEAR 2001

NATIONAL RAILROAD PASSENGER CORPORATION (AMTRAK)

STATEMENT OF HON. TOMMY THOMPSON, CHAIRMAN, BOARD OF DIRECTORS

ACCOMPANIED BY GEORGE WARRINGTON, PRESIDENT, AMTRAK

DEPARTMENT OF TRANSPORTATION

OFFICE OF INSPECTOR GENERAL

STATEMENT OF HON. KENNETH M. MEAD, INSPECTOR GENERAL

DEPARTMENT OF TRANSPORTATION

STATEMENT OF PETER J. BASSO, ASSISTANT SECRETARY FOR BUDGET AND PROGRAMS AND CHIEF FINANCIAL OFFICIAL

OPENING STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. The hearing is called to order.

Senator Lautenberg will join us soon.

First of all, I would like to thank Ken Mead, the Department of Transportation Inspector General; Jack Basso, the Assistant Secretary of Transportation for Budget and Programs; and Governor Thompson, the Governor of Wisconsin, Chairman of the Amtrak Board of Directors for being here today to discuss the Department's most pressing management and oversight challenges.

Many of the issues we discuss today will be familiar to the three of you and probably everybody in the room. Many are issues that

we discussed last year and, unfortunately, many will probably be the subject of at least one hearing next year.

We were going to break this hearing into two panels and talk about Amtrak finance and management issues separately, but both Senator Lautenberg and I are very pressed for time this morning and agreed that we would have all three of you at the witness table, as you have seen, in the interest of saving time.

Thank you again, all of you, for coming, and I am pretty sure we are going to keep this as short as we can.

AMTRAK

Now, I would like to step through the looking glass and talk about Amtrak a minute. Since 1971, the American taxpayers have spent more than $23 billion on Amtrak. Yet, in 1999, the railroad's operating losses were $916 million, the largest in history. Cash losses, which do not include depreciation, were $579 million, which is $54 million higher than the 1998 cash losses and $19 million worse than Amtrak's own projections for 1999.

Amtrak's premier new Northeast Corridor high-speed rail service is delayed by at least 6 months with a negative impact of over $142 million on the Amtrak bottom line.

In addition to high cash losses and unrealized revenue proposals, Amtrak's capital wish list is growing, and there is still no realistic plan for addressing even modest, by Amtrak standards, reinvestment in the capital plan. According to the Inspector General, the railroad's projected Federal funding through 2002—that is, the administration's and Amtrak's execution of the elusive glide path to operational self-sufficiency funding plan—will fall short of the railroad's minimum capital needs during this period by $244 million.

Also waiting in the wings are $12 billion in capital projects on the Northeast Corridor between New York City and Washington, DC, of which $654 million are unaddressed fire and safety projects in the Penn Station, Hudson River, and East River tunnels.

So, what exactly are we on a glide path to?

In the fiscal years 2001 and 2002, the glide path funding plan provides a constraint on both Amtrak and the administration. The budget request is $521 million for each of these 2 years. But once Amtrak reaches or does not reach operational self-sufficiency in October 2002—and I say reach or does not reach in the firm belief that the whole self-sufficiency issue is basically a question of semantics. Once that milestone date is reached, then it is "Katie bar the door." That is when the real money requests for Federal taxpayer subsidies for Amtrak are going to begin.

Ken, I feel I might have gotten carried away there. Check my facts for me, if you would. I know you would. Do you believe it is true that Amtrak will request substantially increased Federal capital funding after the fiscal year 2002 and that this increased capital funding need will extend over the long term? You do.

So, can anyone tell me what is meaningful about the phrase "operational self-sufficiency"? I have here a copy of Public Law 106–69, the fiscal year 2000 Transportation Appropriations Act, and I see capital grants to the national passenger railroad corporation. Those are capital grants with a flexibility provision which allows the railroad to use their Federal funds for some operating pur-

poses. We gave Amtrak this expanded capital definition at the administration's request.

So, it looks to me like the smartest thing we might do would be to declare victory and go home. Amtrak is not receiving an operating grant from the Federal Government now, but this does not mean that the railroad is self-sufficient, not by a long shot. Unless we dramatically change the railroad's structure and direction, real Amtrak self-sufficiency is and always will be an oxymoron.

I feel like I have been talking until I am blue in the face about the hole Amtrak has dug for itself. But when do we begin damage control? When do we back away from this cliff and start to show some responsibility for the taxpayers' money?

A friend and ranking member of this subcommittee, Senator Lautenberg, has championed Amtrak and Federal funding for the railroad since he came to the Senate. You could not ask for a more passionate or effective advocate.

Unfortunately, Amtrak has not lived up to his vision for passenger rail in this country. I sincerely believe that a train or major Amtrak facility should be named after Frank. He is the leading benefactor and has worked tirelessly on the railroad's behalf his entire Senate career. But part of me also wonders whether that would be the sort of tribute that my colleague would want to be remembered by 10 years from now.

Senator Lautenberg, it is always a pleasure to work with you on all the transportation programs and issues that we share in this bill. I know that Amtrak is close to your heart and I welcome you to make any opening comments you might have.

STATEMENT OF SENATOR FRANK R. LAUTENBERG

Senator LAUTENBERG. Thank you very much, Mr. Chairman.

One of the difficulties I have with our situation here is that we are good friends, but we disagree on a few things. And it is hard when good friends disagree. Mr. Chairman, we could dispense with our disagreements if you would just let me manage this according to my judgment.

Senator SHELBY. As much as I love you, I would have to hold on to you there.

Senator LAUTENBERG. I must say this, that Senator Shelby's attitude is one that, while I do not agree, I can certainly understand in terms of what Amtrak's role is because he does not see it as much in his area as we do in ours.

But one of the things that I think we have to be wary of is looking at Amtrak without looking at other modes of transportation and see what we do in those cases. And I am going to be discussing that in just a moment in my remarks because yesterday we passed what I would consider kind of a landmark bill, and that does not mean I like it, but it is a change from not only the procedures here but the attitude that we see in the capital.

So, I am pleased, Mr. Chairman, to have Governor Thompson, who is the Chairman of the Amtrak Board, with us today, and I thank you for doing that.

This is a special hearing for me because it is likely to be my last hearing regarding Amtrak.

Now, when I look at Amtrak, I look at it in terms of not only the Northeast quadrant of the United States, but the value throughout the country as an essential, critical mode of transportation affixed to the other modes, aviation, highways, sea of course, and with the understanding that these other modes—we were so generous with aviation yesterday—will not be able to carry the load we have to carry for passengers in shorter distances.

As a matter of fact, there is a considerable debate about where rail is the best use of the transportation facilities and aviation. And I use my experience, having been in France last year and Belgium, when I went to NATO headquarters. I was in Paris, went to NATO headquarters, and it took me an hour and roughly 20–25 minutes to go 200 miles. People there do not even think of getting on an airplane. It saves so much congestion in the air. And no matter what we put into the system, if we think that we can carry unlimited numbers of passengers in aviation without having things get more congested, less comfortable, less effective, we are kind of kidding ourselves.

So, we are now looking at what we do about Amtrak. With the initiation of truly high-speed rail service in the next several months, it is going to be a real boon to travel and to reductions in congestion and polluted air.

When we said yes to aviation yesterday, we added to the volume of investment in the aviation system substantially, $2 billion this coming year, 2001, as I see it happening. I had my staff people check to see what it is that we spent on aviation in the last years, last decade, regardless of the source whether it was trust fund or otherwise. It was some $85 billion—$85 billion—in airports and FAA operations and things of that nature. That was besides the revenues derived from the PFC's, the passenger facility charge. So, we are looking at an investment in one sector of our transportation network while we, frankly, diminish the other.

Well, when I came to the Senate almost 18 years ago, Ronald Reagan was President. The administration's budget request was zero for Amtrak each year. We know one thing, that if you stay around Washington long enough, you start to see some things change.

Some of my earliest legislative actions in the Senate took the form of amendments to the budget resolution that sought adequate funding for Amtrak. We have always faced an uphill battle, and back then it was even more pronounced, despite the fact that we had some very good friends of Amtrak in John Heinz and Bob Stafford of Vermont and Mark Andrews of North Dakota, and of course, our friend John Chafee, who passed away a few months ago.

In more recent years, I have seen an interest in Amtrak on the part of Senators from other regions of the country. I see more States wanting better, higher speed rail service. In many instances, we see those States putting up the money to meet these needs.

Just last week, the National Governors Association unanimously adopted a resolution calling on this subcommittee to fully fund Amtrak's request of $989 million for fiscal year 2001. This is the first time that I can remember the Nation's Governors speaking so clearly and forcefully on behalf of Amtrak's funding. I particularly want to commend my friend, Governor Thompson of Wisconsin, and

his colleague, Governor Carper of Delaware for this initiative. Mr. Chairman, the Governors of the United States want more Amtrak funding because they know that, even in this period of growing investment in our Nation's highways, we cannot build our way out of congestion.

Just yesterday, when we passed that aviation authorization bill, I led the fight against it. I guess I was not persuasive because we only got 17 votes. But the fact of the matter is that there is a lot of illusion about what that bill is. I opposed the bill because it was unbalanced from the perspective of the needs of the FAA, and it was unbalanced from the perspective of the needs of the entire national transportation system. That bill seeks to force this subcommittee, Mr. Chairman, to provide dramatically increased amounts for FAA's capital accounts. If this subcommittee does not get a very sizeable allocation, these attempts could undermine our ability to fund the FAA's operating account because the $2 billion that was requested this year and is now a new entitlement, which is strange for this body to be considering—an entitlement—it says that these funds have to be met from general revenues over and above that which is produced in the trust fund.

Well, if we do that and let us say that transportation allocation is limited to approximately last year's and we have a $2 billion increase request for FAA, I ask you where is it going to come from. Is it going to come from the Coast Guard?

I heard the argument made yesterday—and I listened very carefully to what my colleagues were saying. There are a lot of supporters for this FAA reauthorization. Talk about the possibility of air crashes once every 10 days when you get to the year 2015. And I assume that, therefore, means that if we want to avoid that, that all the other nations around the globe will also upgrade their systems. But is it any more tragic when people go down in an airplane than when they go down in a ship? And we do not welcome that immigration, but we cannot ignore, being the society that we are, people who are out there on those rafts and have to be stopped from coming. But we do want them to drown as a result.

The Coast Guard's incredible agenda of the things that they have to take care of—I noticed in the paper yesterday, the day before, that the Coast Guard is unable to monitor waste being discharged from cruise ships and it is polluting the waters. They just do not have enough people. Now we are going to man the helicopters with the machine guns so they can stop illegal immigration—I am sorry—whether they can stop drugs from coming in. They do not want to shoot them—but to stop drugs from coming into the country.

Well, then we have got the illegal immigration flow that we see, and we have got the general pollution control. And we see that the Coast Guard is having a tough time keeping up with examining its fishing licenses and requirements for commercial boats. And then they have got the whole navigational structure.

Well, are we going to say to the Coast Guard, too bad, we are just not going to be able to give you the funding? We are going to say the same thing to Amtrak and we will say the same thing to NTSB and other safety agencies. If we have to give it to FAA, it is going to come out of someplace.

Now, if the amount given to transportation is increased by the roughly $2 billion, it is going to come out of someplace like Veteran's Administration or education or something else. Are we so committed to aviation that we are going to ignore other needs in our transportation system? I hope not.

Besides all of that, these funds are earmarked for capital investment facilities and equipment. But we are not guaranteeing any improvement in the account for operations. We are guaranteeing any improvement for training full performance—no, strike that. We are not training controllers to fill in the gap of retirement, which is contemplated in the not too distant future. As a matter of fact, we have just shut down a training facility for controllers. We are walking around as if our heads are in the sand.

I must say it is going to take a great deal more than just increased airport grants to handle the boost in traffic and intra-city traffic in particular. In today's aviation system, we have already too much air space and too many airport gates being absorbed by short-haul flights between cities that would be better served with high-speed rail. Perhaps we are going to be able to call it "winglock" at our airports, just like gridlock on our highways. It is going to get worse if we do not take an aggressive approach to expanding the use of high-speed rail across the country.

That is why I have introduced S. 1900, the High-Speed Rail Investment Act. This legislation uses innovative financing to allow Amtrak to sell $10 billion in bonds over the next 10 years to fund the development of high-speed rail corridors across the country. These corridors represent the future of transportation in America. Congestion on our roads continues to worsen. There is only so much we can do to increase road capacity. The same goes for our airports. New airports are expensive to build and people just do not want them in their back yards.

On the other hand, our rail infrastructure is already there, an untapped resource waiting for its full potential to be realized. Improving our rail infrastructure is a cost effective and environmentally sound way to go. That is why support for developing these high-speed rail corridors is so strong. We do have 35 Senators signed on as cosponsors of S. 1900, and last week Congressmen Amo Houghton and James Oberstar introduced House companion legislation.

I look forward to working with Governor Thompson and my colleagues and the chairman of this subcommittee. I say this to Senator Shelby. We have worked together on a lot of things. I have found him to be willing to listen, and even if we do not agree, we reason it out between us and it works better that way.

I thank you, Mr. Chairman, for the indulgence.

Senator SHELBY. Thank you, Senator Lautenberg.

We have before us, as you know, the honorable Tommy Thompson, Governor of Wisconsin, Chairman of the Amtrak Reform Board, and we have the honorable Kenneth Mead, Inspector General, U.S. Department of Transportation. We also have Peter Basso, Assistant Secretary for Budget and Programs and Chief Financial Officer of the Department of Transportation. Gentlemen, welcome. Governor Thompson, you proceed as you wish.

STATEMENT OF GOV. TOMMY THOMPSON

Governor THOMPSON. Thank you very much, Senator Shelby. I am sort of in a quandary. I have a prepared speech here, Mr. Chairman and Senator Lautenberg, and I decided, after listening to you, Senator Shelby, I wanted to answer your questions.

Senator SHELBY. Absolutely.

Governor THOMPSON. So, I am going to not give my prepared——

Senator SHELBY. Your statement will be made part of the record.

Governor THOMPSON. I wanted to because I have the greatest respect for you, Senator Shelby, always have. I think you are an outstanding individual and I do not say that because I want anything out of you. I just come here because I am passionate about Amtrak. I am passionate about rail passenger service.

I do like your suggestion about naming something after Senator Lautenberg, but I do not know if it should be a train. Maybe a railroad station that we are working on. That would be a nice, fitting tribute to.

Senator SHELBY. We want it to be appropriate, do we not?

Governor THOMPSON. It is going to be appropriate. It will be very nice and I think that that is what we should do.

But I want to thank Senator Lautenberg for his support for Amtrak and, above all, for his tremendous service to the United States. Both of you gentlemen.

Senator LAUTENBERG. Thank you.

RAIL PASSENGER SERVICE

Governor THOMPSON. Senators, I come from a rural State, Wisconsin. And I listened to what you said, Senator Shelby, and I know you are conservative and so am I. And I look at what can we do to invest in the future, to save the taxpayers money and do what is right for America. And I know that is what is in the bottom of your heart, and what you really want to do.

Then I look around the world and I see all the countries in the world that have high-speed trains. I see Spain. I see France. I see Japan. I see all of those countries investing in high-speed trains, much more so than America. And every one of them use that as an integral part of their transportation system. I look at that and I say, if they can do it, why not the United States of America?

Then I take a look at the transportation budget over the last years. You mentioned $23 billion that has been given to Amtrak. You know, that is a big figure until you put it in comparison to the other modes of transportation. Last year alone you spent $32 billion, $10 billion more than the total 25 years that Amtrak has been in existence, for highways. And has highway congestion gone down? Absolutely not. Airports, $12 billion last year. You are going up to $13 billion. We get $521 million, not billion, compared to $30 billion for highways, $12 billion for airports, $5 billion for mass transit. We are the poor stepchild. We are like Cinderella.

But we are something nice to behold. Once you see us, you like us. You are fascinated by us. You want to ride us. And that is what is happening in America. All across America there is a newfound fascination, Senator Shelby, for rail passenger service.

Granted, we have had some mistakes, but George Warrington, who is our President, and this board are dedicated to making the corporation operationally self-sufficient.

OPERATIONAL SELF-SUFFICIENCY

Now, you asked what is operational self-sufficiency. It means that by the year 2003, under the dictates and under the definition of the congressional law, we are going to be able to operate our trains without asking Congress to give us money for operation of passenger services or operation of the trains. But we are coming to you—and we never said we would not—for capital. We are coming to you for capital because we need capital. Every other country subsidizes trains. Even when rail passenger service was at its heyday in the 1920's and the 1930's and the 1940's, it still required the passenger train services to haul mail and express in order to pay their bills. So, you are going to have to subsidize the system with capital.

And let us take a look at this. Now, this is not a Democrat thing or a Republican thing. This is something for America. In California, by the year 2020, there are going to be 19 million more people—19 million more people. That is 55 million people by the year 2020 in California. You have been there, Senator Shelby. You have been there, Senator Lautenberg. Do you think there is any way this country can build enough highways to accommodate another 20 million people in California? Do you think there is a way to site enough airports to handle and accommodate that kind of population growth in California? Absolutely not.

HIGH SPEED CORRIDORS

The only salvation for California is rail passenger service, and that is why the high-speed corridors, that is why the Senator Lautenberg bill, is important. It is an investment. We have to move populations from one center to another for the economy, for safety, and for the overall good of America.

And where is this increased mobility going to come from? I think the future is rail passenger service. We are going to be able to start running high-speed trains.

Granted, George and I are just as upset as you are that they have been delayed for 7 months. You know, we fight with the consortium. I wish you could be in our board rooms when we bring in——

Senator SHELBY. Well, I believe you. I know you, Governor.

Governor THOMPSON. Bombardier hates to hear from Tommy Thompson and George Warrington. We call them every week and say, how is it going? But these trainsets are going to be something of beauty. They were supposed to be delivered in December. They are not going to be here until at least July.

And we want you to ride on one. I want you and Senator Lautenberg to be up in the locomotive with me, and we will even let you drive it, just to show you how fast it goes.

Senator SHELBY. How about letting Lautenberg drive it. He has had more experience.

Governor THOMPSON. Well, that is fine.

Senator SHELBY. But I will go with you.

Governor THOMPSON. But we are going to be able to go from New York City to Washington, DC, in 2½ hours. We are going to be able to go from New York City to Boston in 3 hours. Now, if we can do that, why would you want to get on a commuter airline? Why would you? You are going to be able to get on the train in downtown New York. You are going to be able to get to Washington, DC, in less than 3 hours. You will not have to go out to the airports in that congestion, where it takes you about an hour to get out there. You will be able to get downtown to downtown in about 2½ hours. Your luggage is going to be with you, and we are going to do it with a smile. You are going to be able to get off here at Union Station and be able to come over to the Capitol. People are going to be riding those rail passenger cars, and they are going to be increasing——

Senator SHELBY. When is that day going to be we are going to ride it together?

Governor THOMPSON. Sometime in July, I hope. You are invited and I am going to make darned sure you come. I will come down and pick both of you up and fly you up there.

Senator LAUTENBERG. Order me an engineer's hat.

Governor THOMPSON. All right. We are going to have an engineer's hat.

That is the excitement.

GOVERNOR CONTRIBUTIONS FOR RAIL SERVICE

I realize that I am running out of time, but let us take a quick look at what is happening all over the United States.

Governor Ryan from Illinois has just put in $125 million in capital funding for rail service—$125 million. Governor Ridge, another Republican, Pennsylvania. Governor Hunt, Democrat, North Carolina. Governor Gilmore, Republican from Virginia. Governor Gray Davis, Democrat from California, hundreds of millions of dollars for rail passenger service. Governor Locke from Washington, Democrat. The Democratic and Republican Governors are ponying up money and saying, Washington, Federal Government, meet us half way. Give us the opportunity to develop a rail passenger service in America that you can be proud of, that I can be proud of as Board Chairman, that George Warrington can be proud of as President.

OPERATIONALLY SELF-SUFFICIENT

And that is what we are asking. All we are saying is give us a chance. Give us a little money for capital. We will become operationally self-sufficient under the law by 2003. We are already on the glide path. Ken Mead has indicated we have got some trouble, but we can make it and we are going to make it. I guarantee you we will, and then, with the infusion of capital, we will make a rail passenger service, a national system that will go through Alabama, you know, the Crescent, the Sunset Limited——

Senator SHELBY. Right through my hometown.

Governor THOMPSON [continuing]. And 52,000 people from Alabama rode it last year. We want 152,000 next year, and we want you to be an avid passenger, and we want you also to be a supporter of Amtrak.

PREPARED STATEMENT

That is my testimony, and I thank you very much for your giving me this opportunity.

Senator SHELBY. Thank you, Governor.

[The statement follows:]

PREPARED STATEMENT OF GOV. TOMMY THOMPSON

Mr. Chairman and Members of the Subcommittee: I deeply appreciate the opportunity to appear before you today to talk about one of my favorite subjects: Amtrak.

I want to make three major points today—the first is the positive results Amtrak is delivering that put us on a glidepath to operational self-sufficiency. The second is the strategic steps we are taking to operate more like a business and improve Amtrak's financial performance, including the recent announcement of our Network Growth Strategy. And the third is the very exciting future of high-speed rail, especially the growing partnerships with states. Taken together, these results, commercial actions, and high-speed rail initiatives tell a story of a new Amtrak—an Amtrak committed to growth and performance, an Amtrak that is delivering on the promise made to Congress to become operationally self-sufficient by fiscal year 2003.

Let's start with results.

The last time I appeared before you as Chair of the Amtrak Reform Board was on March 10, 1999—almost a year ago to the day. At that time, I was able to report that our new, commercially focused business plan was already showing positive results. For the first time in Amtrak's history, corporate revenue topped the $1 billion mark for fiscal year 1998, and ridership was up 4.5 percent.

Today, I am happy to say that these positive trends are continuing. Fiscal year 1999 was a record-breaking year for Amtrak. The corporation's revenue reached an all-time high of $1.84 billion, a 7 percent increase from the previous year. Revenue growth helped Amtrak exceed the bottom-line target set in the corporation's business plan for the second straight year—this year by $8 million—keeping us not only on track, but ahead of plan, to achieve operational self-sufficiency by 2003. And total ridership exceeded 21 million in 1999, up 2 percent from last year and 10 percent since it began rebounding three years ago.

As a new millenium dawns, Amtrak is maintaining and gaining momentum. For the first quarter of fiscal year 2000, Amtrak beat its business plan by more than $2 million, with total revenue up 8 percent to $476 million. In Amtrak's national system, many trains saw increased ridership in the first quarter. For the corporation as a whole, ridership increased for a record 12th consecutive quarter.

Second, let me turn now to our commercial initiatives and partnerships.

Mr. Chairman, the last time I testified before this Subcommittee, I pledged to you that Amtrak would become a more market-driven, commercially-oriented company using proven business techniques to maximize our marketplace potential. Let me tell you how Amtrak has kept that promise:

—To improve its bottom line, Amtrak entered into business partnerships with Dobbs International Services, Burlington Northern Santa Fe, United Parcel Service, the United States Postal Service, ExpressTrak, and Dynamex. These partnerships are expected to generate more than $20 million in additional annual revenue and $28 million in long-term savings.

—The mail and express business, which involves the transportation of time-sensitive shipments, produced $98 million in revenue for fiscal year 1999, up 18 percent from fiscal year 1998.

—In fiscal year 1999, capital investment partnerships with states garnered a record $300 million.

—The corporation's real estate and telecommunications ventures returned profits of $106 million, a record high.

—Based on its "expectation that operational self-sufficiency will be achieved," Moody's Investor Service improved Amtrak's credit rating to A3, reflecting a stable outlook. Standard and Poor's publicly assigned Amtrak a triple "B" issuer rating.

—In the area of customer service, Amtrak trained 16,500 employees to begin implementation of the American travel industry's first-ever service guarantee.

—And just ten days ago, Amtrak announced plans to expand passenger service in 21 states and strengthen our competitive edge in the mail and express business—steps that will increase our reach and connectivity and generate $65 million in improvements to our bottom line beginning in 2003. Based on unprecedented, comprehensive economic analysis of our national rail system, our Net-

work Growth Strategy is a market-driven plan to expand our existing network, increase our profitability, and better serve our passengers and partners.

—Let me give you one example of this initiative that demonstrates clearly how our market analysis can improve the performance of under-performing trains and Amtrak as a whole. Our transcontinental train, the Sunset Limited, goes from Orlando to Los Angeles. By rerouting the service from San Antonio directly north to Dallas/Ft. Worth, and then west through Abilene, we immediately improve the financial performance of the train by $2.9 million. We are also bringing it from a regional market of 30,000 people to a much more densely populated market of more than 300,000 people, we are reducing the Ft. Worth to Los Angeles segment of the trip by ten hours, improving the connectivity with other national routes, and increasing both our mail and express and our passenger revenue.

This raises the question—if it is still losing money, why are we operating it? If we took the same train and eliminated it, we would lose $3.2 million of direct savings plus $4.8 million of other variable costs, for a total route savings of $8 million. However, eliminating the train also reduces passenger revenues by $3.5 million and connecting mail and express revenues by $6 million, for a total revenue loss of $9.5.

Simply, we would lose more money by eliminating the train then keeping it. So instead we take the right kinds of action and improve the train's performance by $2.9 million.

Let me turn now to our third major point—developing new, high-speed rail corridors across the nation. On January 31, 2000, Amtrak took the first step in our high-speed rail program—the launch of Acela Regional train service between Boston and New York. The new, all electric Acela Regional service dramatically reduces travel times within New England, making rail an attractive alternative for both leisure and business travelers. So far, Acela Regional is doing 25 to 30 percent better than our initial projections, and outperforming the trains they replaced by 55 to 65 percent.

With this success with the Regional service, it is no wonder that we are anxious to debut Acela Express. When we are confident about announcing a start date, we will do so. The consortium manufacturing the trainsets tell us it will be in July, and we are continuing to have discussions with them. But I would remind everyone that high-speed trainsets in the Northeast are a new technology, and we owe it to the American people to see to it that this technology meets our high standards. Only when it has done so, will we announce a starting date for Acela Express. That is our responsibility, and we intend to live up to it.

Of course, high-speed rail isn't just something that the Northeast wants. The development of high-speed rail corridors is a key component of Amtrak's business plan, but it is even more critical to a balanced and integrated intermodal transportation system. A grassroots movement to expand passenger rail is sweeping across the nation and, as is so often the case in American history, the states are leading the way. State investment in passenger rail is on the rise, with high-speed rail programs now actively underway in 29 states, led by Chief Executives from across the political spectrum, proving that states are willing to partner with the federal government to develop these high-speed rail corridors. Look at the state budgets proposed by my colleagues—governors are serious about developing rail corridors because it represents jobs, clean air, mobility, accessibility, reduced congestion and smart growth—all of which fuel economic competitiveness.

But the federal government has to play a role here, too. Just two weeks ago, at the Winter Meeting of the National Governors' Association, the nation's governors unanimously adopted a resolution calling on Congress to fully fund Amtrak at the authorized level of $989 million for fiscal year 2001.

Of that amount, $521 million—or $48 million less than our request for fiscal year 2000—would enable Amtrak to continue to achieve its goal of operational self-sufficiency by 2003. The balance, $468 million, would be used to develop high-speed rail corridors in states nationwide.

And the collective voice of the nation's governors strengthens a long list of organizations supporting this request. The President has requested it. I am here today to urge you to fulfill this request and thus take the first step in creating a desperately needed federal high-speed rail program. The states have invested their dollars in rail. We now ask Congress to do the same.

It can be successful, Mr. Chairman. As Inspector General Mead said in his testimony before the Senate Commerce Committee only two weeks ago, "If the Administration's proposed budget for 2001 is adopted, Amtrak would have sufficient funds to address minimum needs and invest in projects with long-term growth opportunities like new high-speed corridors." He is absolutely right.

Mr. Chairman, when I appeared before this Subcommittee a year ago, I stressed Amtrak's determination to achieve operational self-sufficiency by 2003. Today, I'd like to reiterate that pledge, but I'd also like to go a step further. Our goal is not merely to survive. It is nothing less than to become a world-class national passenger railroad system—a growing, thriving commercial enterprise that is poised to take advantage of market opportunities and meet the demands of todays travelers. And I believe that our results, our commercial initiatives, our network growth strategy and our high-speed rail plans, demonstrate clearly that this is more than a promise. We are on track to meet these goals, and I urge you to support this effort.

STATEMENT OF KENNETH M. MEAD

Senator SHELBY. Mr. Mead.

Mr. MEAD. The Governor is good, is he not?

Senator SHELBY. He is good. I am ready to vote for him, whatever he runs for. That is why the people of Wisconsin like him.

Senator LAUTENBERG. Amen.

Mr. MEAD. I want to switch gears off of Amtrak just for a moment and preface my brief remarks by saying I have a lot of respect—and the Department does too—for this committee taking pause once a year to focus on what the top issues are facing the Department. I think that is important, to say what the top issues are and how they have changed from the year before.

I am glad Senator Bennett is here, having been such a champion of getting the challenges of Y2K in hand. We dropped Y2K off the list, happily. I think a lot of people thought we were not going to make it at the Department, but with a big effort, we did.

Senator SHELBY. You would not have made it if there had not been the emphasis that was put on it, and we all owe a lot to Senator Bennett for his leadership in the Senate on this issue.

Mr. MEAD. Oh, his leadership was incredible, and we started late too.

COAST GUARD DEEPWATER PROJECT

We added something called the Coast Guard Deepwater Project, which is where the industry is developing a plan for modernizing Coast Guard assets used 50 miles or more off the coast. That is going to be very similar, in terms of dollars, to FAA's National Air Space System plan—about $9 billion to $15 billion. The issue is really not whether the Coast Guard needs to replace these assets. The question is going to be when, how and at what cost.

MARAD'S SHIP-SCRAPPING PROGRAM

We also added MARAD's ship-scrapping program, which is not even within the jurisdiction of this committee, but is an environmental time bomb. The Department of Transportation has fleets of old ships—some dating back to before World War II—and the hulls are corroding. They are sitting there in such waters as the James River. Currently the Coast Guard asks people to pay it—pardon me, not the Coast Guard. MARAD wants to ask people to pay it to scrap these vessels. Well, that is not going to work. The U.S. Navy is doing the opposite, paying people to scrap obsolete Navy vessels.

COMPUTER SECURITY

We split out transportation security and computer security, and we did that because we think the issues are distinct. We think computer security is going to be a major issue, just like Y2K. A big difference, though, is that there is no ending date. Many of the vendors that were around to help you out with the Y2K now are standing in line to help you assess your computer security problems.

FAA

On FAA, we testified a couple of weeks ago on air traffic control modernization and FAA financing. Not to be redundant about our message at that hearing, but I should say that if people believe that FAA's problems with these big modernization initiatives have been a lack of money, they are incorrect. I think everybody wants to invest appropriately in FAA, but more money is not going to solve some of the big problems that have haunted these modernization programs.

Senator SHELBY. Are you going to speak to what will solve some of the problems other than money?

Mr. MEAD. Yes, I certainly can. I was going to save that for questions and answers.

Senator SHELBY. Okay.

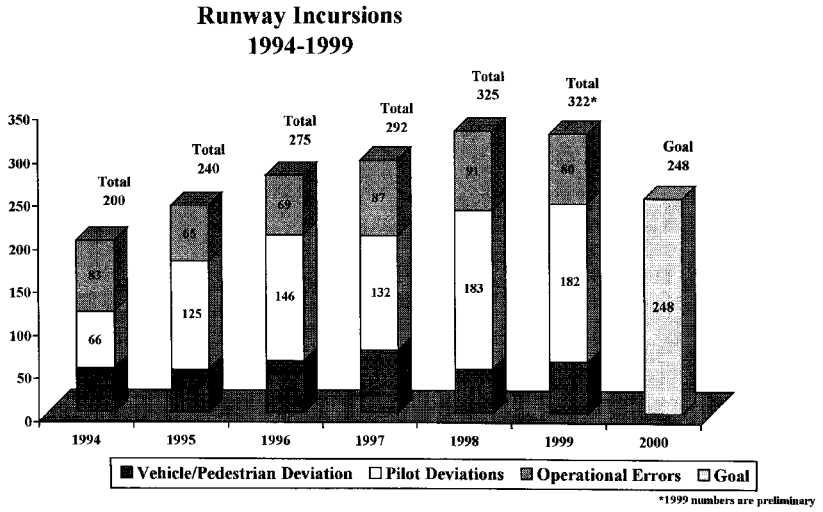
AVIATION SAFETY

Mr. MEAD. In aviation safety, I wanted to mention three points. One is runway incursions. We absolutely have to get a handle on runway incursions. They were about 160–170 a year in 1993. They are now up to 327 a year. This is an accident waiting to happen.

I have a chart I would like to put in the record, if I might, that shows the trend line.

Senator SHELBY. Without objection.

[The information follows:]



Senator SHELBY. Are you going to talk about the chart?

Mr. MEAD. Yes. You can see that, between 1994 and 1999, it has gone from about 200 to 322. Runway incursions, Mr. Chairman, are similar to a near mid-air collision. It is just that planes come too close together on the ground. In fact, the worst aviation tragedy in history occurred on the ground in the Canary Islands.

Operational errors. These are errors made by controllers. They have been going up too. They went from 185 in 1998 to 940 in 1999. I want to commend FAA and the Secretary for taking the initiative on code-share safety. This is where you have different airlines taking separate legs of a trip. If you are flying on a foreign carrier, what assurances do you have that that foreign carrier is safe? FAA has initiated a program there.

In surface transportation safety, Congress enacted the Motor Carrier Safety Improvement Act. There are 10,000 carriers on the road today that have an unsatisfactory safety fitness rating. We need to get serious here and not only establish a vision of leadership in the new administration, but also shut down some of these carriers. If they are not going to be safe, we need to get them off the road.

Transportation infrastructure. This represents a major infusion of dollars into transportation. I think the experience of the last 2 months with the Central Artery—this is a project that went from about $3 billion to, recently announced, about $12.2 billion. I do not believe the Artery management was forthright with the Department or anybody, at least publicly. I think the Department and the Federal Highway Administration had gotten too close to the project management in that case. I am pleased to see Secretary Slater has moved out to, I think, take firm, corrective action in that area.

FINANCIAL STATEMENT

We signed off yesterday on a clean opinion on FAA and the Department's financial statements. They have been trying for 9 years to get an unqualified or "clean" financial opinion, the kind most corporations have to have. We were very pleased to do that. The Department deserves a lot of credit. Mr. Basso, on my right, was a chief architect behind the Department's success there.

On Amtrak, sir, if Amtrak makes it, they are not going to make it by much on operational self-sufficiency. In the capital area, they are, by our projections, going to fall short by over $200 million through 2002. And Governor Thompson is right, after that glide path is over, they are going to require capital assistance. There are no two ways about it.

I think a key issue here is getting the Acela high-speed train in operation and deployed. We really will not know about the future of Amtrak until we get that high-speed rail line running.

Senator SHELBY. Are you going to be on that train with us?

Mr. MEAD. I will be on it. I will not be driving it. I will sit next to you.

Senator SHELBY. Senator Lautenberg.

Senator LAUTENBERG. I am driving it.

PREPARED STATEMENT

Mr. MEAD. I also want to make a passing reference to work that we are doing in the aviation area. We have some obligations to review how well the airlines are treating their passengers through airline service commitments. We are also doing a lot of work on aviation delays, which I think is quite interesting. Actually, we are doing that work for this committee. If you have any questions and answers about that, we would be glad to answer them too.

I will conclude with that, sir.

[The statement follows:]

PREPARED STATEMENT OF KENNETH M. MEAD

MANAGEMENT OVERSIGHT ISSUES

Mr. Chairman and Members of the Subcommittee: We appreciate the opportunity to appear today to discuss the major management issues facing the Department of Transportation (DOT).

Last year, we testified before this Subcommittee on what we then saw as the top 10 management issues facing DOT. At the request of Congressional leadership, we updated our list and prepared a new report outlining the top 12 significant issues facing DOT. This report, issued in December, includes the Department's progress in the last year. Copies of the report have been provided to the Subcommittee as part of my written statement.

The 12 items on this year's list are:

—*Aviation Safety*.—The Federal Aviation Administration (FAA) must proactively address aviation safety issues such as growth in the number of runway incursions and operational errors.

—*Surface Transportation Safety*.—The Department must effectively implement new enforcement tools and other improvements to the commercial driver's license program resulting from the Motor Carrier Safety Improvement Act of 1999, better coordinate the hazardous materials programs of the various Operating Administrations, and target its efforts to reduce rail-highway grade crossing accidents with proven, cost-effective strategies.

—*Air Traffic Control Modernization*.—Problems persist with technologically challenging systems, such as the Wide Area Augmentation System (WAAS) and Standard Terminal Automation Replacement System (STARS). These two systems alone have cumulative estimated program costs of over $4 billion, and are experiencing cost and schedule difficulties. For example, WAAS is experiencing software and hardware problems that will have significant cost and schedule implications that have yet to be determined. Consequently, WAAS will not meet the September 2000 milestone for initial operating capability. The STARS schedule has been impacted by the software development needed to resolve computer-human interface issues and other new requirements. The last full service STARS is now planned to be deployed by September 2008, over 3½ years behind schedule.

—*FAA Financing*.—Congress is getting closer to finalizing a new authorization bill for FAA. The proposed package includes $40 billion over 3 years with large increases for airport improvements and air traffic modernization. While the increases represent a significant investment opportunity for aviation infrastructure, additional funding alone is not the only solution. FAA will need to contain the growth in operations costs, provide for greater risk sharing with contractors, and expedite an accurate cost accounting system.

—*Surface, Marine, and Airport Infrastructure Needs*.—It is imperative that the historic levels of expenditure on transportation infrastructure, amounting to $50 billion in fiscal year 2000 alone, be effectively monitored. We recently reported that trends in construction cost on the Central Artery could raise the cost of that project by up to $942 million. Last October, both FHWA and project officials rejected our projections. Then, on February 1, 2000, FHWA accepted the project's latest Finance Plan. Later that same day, the project announced a $1.4 billion cost increase that was not reported in the Finance Plan. If the FHWA's oversight had been effective, they would have known about cost increases as they were occurring, and certainly before they accepted the project's Finance Plan.

—*Transportation Security*.—FAA must continue to improve its oversight of aviation security, particularly in areas such as airport access controls and the effective use of baggage screening equipment. In surface transportation security, DOT must begin to develop a comprehensive research strategy and the ability to perform meaningful risk assessments.

—*Computer Security*.—DOT needs to perform risk/vulnerability assessments on its critical computer systems and use these assessments to prioritize its work in addressing computer system vulnerabilities.

—*Financial Accounting as Related to the CFO Act*.—After 9 years of work and because of extraordinary efforts in the last 2 years, DOT was able to support all material line items in its fiscal year 1999 Consolidated Financial Statements, thereby earning DOT its first "clean" audit opinion. These Consolidated Financial Statements show DOT and its Operating Administrations had assets of $76 billion, liabilities of $30 billion, operating costs of $42 billion, and total budget authority of $57 billion. While significant progress has been made in improving the financial records, DOT still needs to make major improvements in its financial management systems.

—*Amtrak Financial Viability/Modernization*.—Amtrak still faces major challenges to its goal of operating self-sufficiency: 1999 cash losses were higher than expected, implementation of high-speed train service has been delayed; and there are significant capital investments which must be made to protect Amtrak's future safety and potential profitability.

—*The United States Coast Guard's (USCG's) Deepwater Asset Replacement Project*.—The Coast Guard faces a challenge in developing an acquisition and budgeting strategy for replacing its Deepwater aircraft, vessels and related equipment. These assets will reach the end of their useful lives over the next 30 years. It is expected to cost $9.8 to $15 billion to replace this capability. The question is not whether Deepwater assets have to be replaced or modernized, but how, when, and at what cost.

—*The Maritime Administration's (MARAD's) Ship Scrapping Program*.—MARAD, the Administration, and Congress need to consider how MARAD can best dispose of the 110 vessels it currently has slated for disposal (many of which pose significant environmental dangers). Overseas sales have been halted, there is limited capacity in the domestic ship scrapping industry, and MARAD is required by law to dispose of these ships in a manner that brings the greatest financial return to the Federal Government. The approach of selling vessels for scrapping will not work in today's marketplace. MARAD will need relief from the requirement to maximize financial returns and will need authorization and funding for a program similar to a Navy pilot project that is paying to have vessels scrapped.

—*DOT Implementation of GPRA*—For DOT to continue its success in implementing GPRA, it must improve the timeliness and reliability of its performance data.

In addition to the 12 management issues presented above, the state of service delivery in the aviation industry has developed into a major customer service policy matter. In order to apprise the Congress and the Secretary about the progress of airline efforts, we will be engaged this year in several important audits of the state of service delivery in the aviation industry. In my testimony today, I would also like to summarize for you the status of our work on airline flight delays and on airline pricing and customer service issues.

I. CHANGES FROM THE OIG'S 1998 LIST OF TOP PRIORITY MANAGEMENT CHALLENGES

Our 1998 and 1999 lists are very similar. We deleted only one item from the 1998 list: Year 2000 Computer Issues. From mid-1997 to December 1999, DOT repaired, tested, implemented, and independently verified fixes to over 300 mission-critical systems. Contingency plans and command centers were established in case of any Year 2000 problems. These were not needed, as all mission-critical DOT systems successfully transitioned to the year 2000.

We added two issues to this year's list: the United States Coast Guard's Deepwater Capability Replacement Project and the Maritime Administration's Ship Scrapping Project.

Coast Guard's Deepwater Capability Replacement Project.—In its Deepwater Project, the Coast Guard proposes spending $9.8 to $15 billion over the next 20 years to replace or modernize all of the vessels and aircraft it uses 50 miles or more offshore. Current deepwater assets include 206 aircraft, 93 vessels, and related sensor, communications, and navigation systems. This represents 99 percent of the Coast Guard's aircraft and 100 percent of its vessels 110 feet and longer, excluding

buoy tenders and icebreakers. Primary deepwater missions include search and rescue, drug interdiction, alien migrant interdiction, and fisheries law enforcement.

In 1996, the Coast Guard received Departmental approval to proceed with the design of the Deepwater Project. Through fiscal year 2000, a total of $75 million has been appropriated for project planning and preliminary design. For fiscal year 2001, $42.3 million has been requested to allow the Coast Guard to finish the planning phase and prepare its acquisition strategy. For fiscal year 2002, the Coast Guard anticipates requesting $350 million to begin the Deepwater acquisition.

The Coast Guard's Deepwater assets will reach the end of their useful lives over the next 30 years. The question is not whether they have to be replaced or modernized but how and when. However, the planning phase for the project will not be completed in time to support the fiscal year 2002 budget request. Coast Guard will have to reconcile how it can proceed with a budget request in advance of completing the planning process. An important subsidiary issue is how priorities will be established within annual fiscal limitations. Three options are to: defer the anticipated $350 million fiscal year 2002 Deepwater budget request until the results of the planning process are known; expedite the planning process to identify the most critical deepwater needs and justify the fiscal year 2002 budget request on that basis; or use information available to develop a current cost and schedule estimate for the project that identifies anticipated acquisitions and use that to justify the fiscal year 2002 request.

MARAD's Ship Scrapping Project.—The Department, the Administration, and the Congress also face a challenge in determining how to dispose of MARAD's fleet of environmentally dangerous vessels in a timely manner. MARAD currently has 110 vessels in its fleet awaiting disposal, with 88 of these vessels slated specifically for scrapping. The average age of these vessels is 46 years, and they have been awaiting disposal for an average of 13 years. Forty of these vessels are considered "worst condition." These vessels are literally disintegrating.

Environmental dangers associated with MARAD's deteriorating vessels increase daily. These ships contain hazardous substances such as asbestos and solid and liquid polychlorinated biphenyls. These vessels also contain oil that, if leaked into the water, would require immediate Federal and State action. MARAD has applied over 20 patches to leaks, removed hazardous materials, and pumped oil out of one vessel in the James River Reserve Fleet that is over 30 years old. That vessel is disintegrating to a point where it will not be seaworthy much longer.

Given the small size of the domestic ship scrapping industry and the Administration's policy against using foreign ship scrapping facilities (which have poor environmental records), MARAD will likely need relief from the legislative requirement that it dispose of all obsolete vessels by 2001 in a way that maximizes financial return to the Government. MARAD would also benefit from authorization and funding for a program similar to a Navy pilot project, which pays for ship scrapping.

This year's list has one other change. Last year our list cited Transportation and Computer Security as one issue. In view of the significance of both of these issues, we identified them separately in this year's report.

Transportation Security.—The U.S. transportation system includes 3.9 million miles of public roads, 1.5 million miles of oil and natural gas pipelines, 123,000 miles of major railroads, over 24,000 miles of commercially navigable waterways, over 5,000 public-use airports, 508 transit operators in 316 urbanized areas, and 145 major ports on the coasts and inland waterways. Over the last several years, the changing threat of terrorist and other criminal activities has heightened the need to improve domestic transportation security over these vital transportation assets.

The need to protect aviation security has long been recognized. Over 450 airports and 290 air carriers are subject to Federal Aviation Regulation security requirements and have FAA-approved security programs. More than 500 FAA security field agents monitor industry's compliance with these programs. Since 1997, FAA has also deployed more than 600 machines, at a cost exceeding $250 million, for screening passenger checked and carry-on baggage. To improve its aviation security program, FAA should develop an integrated strategic security plan, work with the industry to improve airport access controls, and develop new requirements for issuing and accounting for airport identification media.

Surface transportation security issues, on the other hand, have not been a high priority. Also, the size and openness of surface transportation systems makes it much harder to develop appropriate, cost-effective security requirements. Precisely because of their size and openness, however, surface transportation locations can become terrorist targets. For example, in March 1995, a cult released nerve agents in a Tokyo subway, and over 5,500 subway travelers required medical treatment. As a first step toward addressing these vulnerabilities, the National Research Council

recommended that the Department work toward a surface transportation security strategy and develop the ability to perform meaningful risk assessments on surface transportation security threats.

Computer Security.—The Department needs adequate computer security to ensure the integrity, confidentiality, and availability of its automated operations. The recent network attacks on major e-retailers demonstrate the need to re-examine this area in light of today's technology. While interconnected computer networks have made our operations more efficient, they also created new challenges for us. For example, we can no longer rely on physical isolation as our key safety net, which has been an important part of security for the Air Traffic Control Systems.

DOT, with $2.7 billion in planned expenditures for fiscal year 2000, is responsible for the largest information technology investment among all civilian agencies. There are over 600 mission-critical systems in DOT, including safety-sensitive Air Traffic Control Systems, Coast Guard search and rescue systems, and financial management systems supporting the distribution of billions of dollars in grants.

Computer security comprises a wide range of work, from implementing sophisticated network tools to increasing employees' security awareness to performing proper background checks on people occupying key positions. To meet its responsibilities for secure computer operations, DOT should: perform risk assessments of its computer systems in order to prioritize use of limited resources, implement cost-effective protections for its critical systems, secure entry points to its interconnected network systems, and emphasize basics such as security training and background checks.

II. ITEMS CONTINUING FROM THE OIG'S 1998 LIST

Eight items on last year's list are also on this year's list. They are: Air Traffic Control Modernization; FAA Financing; Aviation Safety; Surface Transportation Safety; Surface, Marine, and Airport Infrastructure Needs; Financial Accounting as Related to the Chief Financial Officers Act (CFO Act); Amtrak Financial Viability/Modernization; and DOT Implementation of the Government Performance and Results Act (GPRA).

Last month, at a joint hearing of this Subcommittee and the Senate Budget Committee, we testified on Air Traffic Control Modernization and FAA Financing. That testimony included detailed and updated discussions of our concerns in these areas, so we have not addressed them in this statement.

I would like to give you a short summary of the other six items continuing from last year.

Aviation Safety.—The aviation industry expects continued growth in air traffic and closer spacing between airplanes due to increased demand and the implementation of new technologies. The key safety issues facing FAA include: ensuring that U.S. air carriers perform meaningful safety assessments on their foreign code share partners; using training and new technology to reverse the upward trend of runway incursions; reducing the number of air traffic operational errors and deviations; and working with the Congress to ensure passage of the FAA Reauthorization Act.

Surface Transportation Safety.—Motor vehicle, railroad, and rail transit accidents account for over 42,000 deaths annually—more than 90 percent of all transportation-related fatalities. The Department's first priority in this area is effective implementation of the Motor Carrier Safety Improvement Act of 1999. DOT must move quickly to establish the needed leadership in the new Federal Motor Carrier Safety Administration (FMCSA) and publish the 30 rulemakings FMCSA believes necessary to implement the new Act. These rulemakings would strengthen the commercial driver's license program by enhancing the number and type of disqualifying violations, the enforcement of civil penalties, and reviews of new motor carrier operators.

In terms of railroad safety, DOT has made significant progress in reducing rail-highway grade crossing accidents and fatalities, which were once the leading cause of railway deaths. To continue this trend, DOT should target its limited resources to proven, cost-effective strategies, such as installation of median barriers preventing drivers from crossing tracks when a train is approaching.

The Department must also make adequate provisions for the safe transport of hazardous materials. While the probability of a serious hazardous materials incident is low, the consequences of such an incident can be catastrophic, as evidenced by the 1996 ValuJet crash in Florida. The Department is about to issue a Hazardous Materials Program Evaluation (HMPE), which will recommend establishing a central focal point to administer and deliver a DOT-wide hazardous materials program. This DOT-wide program would focus more outreach and inspection resources on shippers who introduce hazardous materials into the transportation stream and

strengthen standards to ensure that all employees handling hazardous materials are adequately trained.

On the issue of pipeline safety, there is a critical need to ensure that DOT continues to enforce pipeline safety laws and implements recommendations that could further strengthen pipeline safety programs. Issues to be considered during reauthorization include: requiring Research and Special Programs Administration (RSPA) to comply with outstanding Congressional mandates to revise the inspection process; expanding the focus of RSPA research to include "smart pigs" that can detect seam weld defects and alternative pipeline inspection technologies for pipelines that cannot accommodate smart pigs; training RSPA safety inspectors on the capabilities and use of pipeline inspection technologies; and implementing revisions in the collection of pipeline accident data to expand accident causal categories for more detailed trend analysis.

Surface, Marine, and Airport Infrastructure Needs.—The Transportation Equity Act for the 21st Century (TEA–21) guarantees a minimum of $198 billion in Federal funds for surface transportation infrastructure in fiscal years 1998 through 2003.

Since the oversight of TEA–21 projects has shifted to grantees, resulting in less direct Federal Government control over infrastructure projects, there is a need to identify and apply best practices to major projects and find systemic solutions to problems. For example, DOT needs to: require and closely examine finance plans for all large infrastructure projects; establish criteria for finance plans to ensure complete and consistent reporting of basic standardized financial data in the plans; monitor project performance and mitigate funding risks for infrastructure projects to protect the Government's financial interests as soon as problems are identified; and continue to promote owner-controlled insurance programs that can reduce program costs, while ensuring that Federal reimbursement for these programs is limited to the amounts actually needed to purchase insurance coverage or pay claims.

Also, as the results of OIG investigations demonstrate, vigilance must be improved across the Federal, state and grantee levels, in order to thwart fraud against TEA–21 funds.

In terms of airport infrastructure, FAA must exercise adequate oversight to ensure that airport revenues are reasonably established and that funds are used for eligible purposes. FAA must also ensure that airport sponsors require that their annual audits cover airport revenue use. The most important priority to support this and other aviation issues, is passage of the FAA Reauthorization Act.

Financial Accounting as Related to the Chief Financial Officers (CFO) Act.—During fiscal year 1999, DOT made extraordinary and labor-intensive efforts to overcome its accounting and financial system weaknesses. With these efforts, DOT was able to support the material items on its financial statements, thus earning an unqualified, or clean, audit opinion on the fiscal year 1999 Highway Trust Fund, FAA, and DOT Consolidated Financial Statements. Although getting a clean audit opinion was a major achievement, it is not the ultimate goal.

DOT still has to make long-term improvements in its financial management and accounting systems. If such improvements are not made, DOT will have to continue the same type of extraordinary, expensive, and labor-intensive efforts in the future. Such efforts are not sustainable for the long term and unnecessarily expend significant amounts of resources to maintain accurate records, which should be routinely produced by the accounting systems.

To its credit, DOT recognized several years ago that its financial systems do not meet today's needs. DOT is currently designing a new system, and plans to have a state-of-the-art, off-the-shelf commercial financial management system, with a cost accounting module, fully operational by June 30, 2001. FAA also is developing a separate cost accounting system for its management needs and to support user fee calculations. FAA's system is scheduled to be fully operational by fiscal year 2002.

Amtrak Financial Viability/Modernization.—Amtrak's 1999 financial results show some progress, but still indicate the need for major improvement. Amtrak's cash loss last year was $579 million, $54 million higher than the 1998 cash loss and $19 million worse than Amtrak had projected. Over half of the $692 million in projections we considered to be "at risk" in the 1999 Business Plan represented investments and revenue placeholders for actions including the Market Based Network Analysis. This year, it is imperative that Amtrak begin to realize the payoffs of such investments—the small steps made the past 2 years must now be replaced with large strides. First quarter 2000 performance indicates these strides are slow in coming. Passenger revenues continue to lag, led by Intercity, which finished nearly $11 million behind plan, $2 million worse than the same period last year. Acela high-speed rail is critical to Amtrak's ability to reach operating self-sufficiency. The impact of delays in 2000 will be mitigated by offsetting expense savings and other means, but

this should not understate how important it is for Amtrak to bring high-speed rail on line as soon as possible.

The criteria used to measure whether Amtrak has made its self-sufficiency goal needs to be defined: Amtrak will require capital funding after 2002 to continue operations of the railroad, and will not be able to fund depreciation, the costs of capital replacement, without Federal assistance. Allowing Amtrak to use capital funds for progressive overhauls will encourage Amtrak to make overhaul decisions based on good business practices, rather than what can be federally funded after 2002.

Amtrak's capital program should first address minimum needs before investing in high rate-of-return projects like new high-speed corridors. Although these investments are likely to result in revenues that will help Amtrak reach and sustain financial viability, Amtrak must first make the investments necessary to ensure the safe, reliable operations of the existing system. It will not have enough capital funds available to do both. One of Amtrak's most pressing needs is the $654 million unfunded fire and life-safety needs in Penn Station-New York and the associated river tunnels. Unless additional funding can be identified, the schedule for meeting these needs will extend to 2014. To ensure that these life-safety-requirements are completed in a timely manner, the Federal Railroad Administration (FRA) Administrator should work with Amtrak, New Jersey Transit, and the Long Island Rail Road to identify the necessary funding.

DOT Implementation of GPRA.—DOT's first strategic and performance plans were rated by Congress as the best in the Federal Government. Further, in 1999, DOT had the foresight to do a dry run of preparing a performance report for the Congress by March 31, which will be the annual statutory due date starting in 2000. In the dry run, DOT was able to report prior year data for only 63 percent of its measures. Agency staff expect to be able to provide 1999 data for over 90 percent of the measures in the performance report they will submit to Congress this March 31.

To continue its GPRA success, the Department needs to continue to improve the reliability and timeliness of its performance data; face the challenge of having to accomplish some significant goals through States and other third parties; and ensure that the Operating Administrations set baselines, develop performance measures, and set performance goals for all important initiatives.

III. OIG FLIGHT DELAYS AND AIRLINE PRICING AND CUSTOMER SERVICE REVIEWS

In addition to the 12 management issues presented, the state of customer service delivery in the aviation industry has developed into a major policy matter. At the request of the Congress, we have initiated three reviews in this area.

—*Airline Flight Delays*.—Last summer, the increasing number of delayed and cancelled flights sparked sharp debate over the cause or causes of these delays and cancellations. FAA cited unusually bad weather as the primary culprit. In contrast, the airline industry held FAA responsible, citing several problems with air traffic control procedures and equipment outages. To gain a better insight into this important service delivery issue, this Subcommittee asked us to examine the sources of delays and cancellations and the factors that contribute to them. We are currently preparing our report and expect to issue it this Spring.

—*Airline Pricing and Customer Service*.—The Transportation Appropriations Act of 1999 required the OIG to report on consumer access to lowest airfares and airline overbooking disclosure practices. We recently initiated a review to: identify the extent to which actual or potential barriers exist to consumer access to comparative price and service information; and determine the extent to which airlines fail to disclose to passengers or ticket agents whether flights are overbooked. In addition to airlines and travel agents, we will be exploring these issues with Internet and other ticket distribution providers, consumer organizations, and aviation industry experts.

We have established an Internet web site and a toll free telephone number where consumers can submit descriptions of their travel experiences directly to us, and we will include an analysis of these experiences in our report. We expect to issue our findings later this year.

In December 1999, the Chairman of the Committee on Commerce, Science, and Transportation asked the OIG to review the domestic air carriers' customer service commitment plans. These plans describe what the airline will do in areas such as notifying passengers of known flight delays and cancellations; meeting customers' essential needs during long on-aircraft delays; improving on-time baggage delivery; providing prompt ticket refunds; and accommodating disabled and special needs passengers.

By mid-June, we will provide the Commerce Committee with an interim report on the completion, publication, and implementation of the airlines' Customer Service Commitment Plans and the individual air carriers' procedures to carry out their commitments. Our final report, due on December 31st of this year, will provide our evaluation on the quality of each air carrier's plan compared to the commitments. To date, we have visited the corporate headquarters of each of the 14 air carriers included in our review. We are developing procedures for testing and evaluating the air carriers' implementation of the commitments.

This concludes my formal remarks. Thank you for inviting me to testify this morning. I would be happy to answer any questions the Subcommittee may have.

STATEMENT OF PETER J. BASSO

Senator SHELBY. Mr. Secretary?

Mr. BASSO. Thank you, Mr. Chairman, Senator Lautenberg, and Senator Bennett. Good morning. I will be very brief.

Senator SHELBY. Your written statement will be made part of the record.

Mr. BASSO. Thank you, sir.

SAFETY AND Y2K

Let me just, in the interest of time, Mr. Chairman, touch on two things that are very important in the management areas of the Department.

They are, first of all, our management and expansion of our safety programs. The budget that we put before this subcommittee this year for fiscal year 2001 requests substantial increases in all areas of safety, and I want to particularly emphasize the importance of us working with the Congress to assure that those funds are made available. I would hope that the subcommittee can accommodate those changes.

The other area that I want to touch on is the Y2K issue that Mr. Mead has touched on. Senator Bennett certainly deserves great credit for the prod that helped this Department go from what I would consider basically nowhere to completing the job on time. I particularly appreciate that, and Deputy Secretary Downey, Jane Garvey, and others deserve great credit for delivering on that point.

CLEAN AUDIT

The other point I wanted to touch on—there are many I could in these management challenge areas—is the Department receiving a clean audit opinion, something that we pursued somewhat like the holy grail since 1991. As one of the people who actually worked on writing the Chief Financial Officers Act, I know what it means. It is not important to get an A on the report card, although I have to give great credit to the Inspector General who worked very closely with us to get this done, as well as others. What is important is that it represents an integrity that we can represent to the American public and the Congress as to what we have done with assets and how we have accounted for them.

But if it stops at that point—and I probably will not have the opportunity to appear before this subcommittee again on this issue—it would be a total failure. To simply get an A on the report card is a failure.

What has to be done, and what I committed to assuring gets done as the CFO of the Department, is that the systems and procedures are in place that are necessary to make this a routine matter so that this committee does not have to ask the question about this challenge in future years. What really is at the heart of what we are going to complete this next year with our new DELPHI accounting system, a state-of-the-art system, our cost accounting system at FAA, and the audits I think are essential to keep us all on our toes and focused on the issues in that regard. So, we should give the IG a little more money for that, but that is another issue. We will deal with that.

PREPARED STATEMENT

In conclusion, Mr. Chairman, I really do appreciate the opportunity to appear this morning, but I would prefer I think, in deference to the committee, to offer the opportunity for you to ask questions of myself and others here rather than carry on at great length.

Senator SHELBY. Thank you.

[The statement follows:]

PREPARED STATEMENT OF PETER J. BASSO

Mr. Chairman, Members of the Subcommittee. Thank you for the opportunity to testify on management issues, challenges and related accomplishments of the Department of Transportation.

OVERVIEW

Last year, when I testified before this Subcommittee on management challenges facing the Department of Transportation (DOT), I stated that Americans demand mobility and that we have an obligation to provide a transportation system that meets both our economic and mobility requirements in a safe and environmentally friendly way. This obligation is a long-term one and must be part of our vision for the transportation system of the 21st century. The management challenges that face our transportation system and the Department today are critical to our long-term success in meeting this obligation.

These challenges include:

—Rapidly growing travel demand, which affects the condition and performance of our transportation system. We face this challenge on the water, on the land, and in the air.

—Population changes, including increasing number of elderly individuals and drivers, which presents new mobility and safety challenges.

—Transportation behavior that is not acceptable, such as aggressive driving. The Department continually strives to find new ways to convince people to drive safely on our roads. Even though our transportation system's performance reflects the strength of our safety commitment, with 4,300 fewer people dying on our roads than in 1993, an unacceptably high number of people continue to die on our roads each year.

—Using technology in a cost-effective manner to improve our performance.

OVERALL DEPARTMENTAL MANAGEMENT

The Clinton-Gore Administration has made management of the Federal Government a top priority and a reality. The Secretary and Deputy Secretary have put in place an overall Departmental management structure that stresses leadership, coordination, innovation and results.

We in DOT strive to be excellent managers of DOT's resources, ensuring that we deliver programs that customers want with maximum efficiency, and that we manage for results. To determine how best to deliver programs we emphasize goal setting, customer involvement, and measurement of progress against these goals to determine our effectiveness and efficiency.

The Department has been aggressively implementing the National Partnership for Reinventing Government (NPR) and Government Performance and Results Act

(GPRA) mandates as well as the Chief Financial Officers (CFO) Act. In reinventing our procurement practices, we now use the purchase card for over ninety percent of our small purchases. We are now utilizing e-commerce solutions, so that those who need to pay us for services, fines and fees can do so quickly and efficiently. Our strategic and performance goals focus on outcomes—what we are attempting to achieve—not outputs (how much we do of one activity or another). In addition in fiscal year 1999, DOT established a procurement performance management system that uses a set of balanced performance measures to evaluate the effectiveness and efficiency of our procurement system in helping achieve our missions. The public deserves a Department of Transportation that is outcome oriented and our best-in-government strategic and performance plans show that we know what the public expects of us.

We have one transportation system, and making it work better requires a ONE DOT approach. The Department is improving its internal management activities by bringing intermodal energy and expertise to bear on all transportation problems. Our ONE DOT corporate management strategy is of special note. This strategy encourages and rewards collaboration across modes and agencies at all levels. It promotes efficiency and creativity, and instills in our employees the sense that they represent not just their operating administration but the whole Department in its response to the public. This innovative team thinking has led to the completion of our hazardous materials program evaluation whereby the Department's programs regarding both shippers and carriers of hazardous materials were evaluated, and our success in achieving an unqualified audit opinion on our financial statements this year for the first time.

My testimony today addresses our progress on the management challenges identified by the Inspector General: Surface Transportation Safety; Aviation Safety; Air Traffic Control Modernization; FAA Financing and Reauthorization; Surface, Marine, and Airport Infrastructure; Transportation Security; Computer Security; Financial Accounting/Chief Financial Officers Act; Amtrak Financial Viability and Modernization; Coast Guard Deepwater Capability Replacement Project; Ship Disposal Program; and Government Performance and Results Act Implementation.

SURFACE TRANSPORTATION SAFETY

Transportation safety is the Department's top priority. Safe and efficient transportation systems are critical to our economic security and our quality of life. Although our transportation system is already the safest in the world, much of what we do is aimed at making it safer, as travel continues to grow. In managing a myriad of safety programs in conjunction with the states, other public authorities, and the private sector, as well as directly through enforcement, we must constantly focus on outcomes. The fiscal year 2001 budget directs a record $4 billion to transportation safety programs, 13 percent above this year's level.

A major focus of the management of our safety efforts is reducing highway crashes, which account for more than nine out of every ten transportation fatalities. Highway crashes are the leading cause of death for children, teenagers, and young adults. In addition to the tragic toll on our families, crashes cost our economy an estimated $150 billion annually. Unless we continue to lower the fatality rate, the growth in travel created by our expanding economy will result in an increase in the number of deaths. To reduce the fatality rate, we must focus on all three components of the safety equation: safer roads, safer vehicles and safer drivers.

The top priority to improve safety is simple—seat belts and child safety seats work! A person is almost twice as likely to die or sustain a serious injury in a crash if unbelted. Today, seat belts save about 11,000 lives annually. In 1997, the President set a national goal of achieving an 85 percent seat belt use rate by 2000 and a 90 percent seat belt use rate by 2005. These goals will be difficult to achieve, as our progress in increasing seat belt use has been incremental. Information, education and outreach are critical efforts if we are to reach that goal and the fiscal year 2001 budget proposes substantial funding increases for NHTSA in these areas.

The President has also set a goal of making .08 the national standard for maximum blood-alcohol levels while driving. Although alcohol-related fatalities have declined over the past ten years, impaired driving remains a leading cause of traffic fatalities. These are irresponsible actions on the part of the driving public and should not be condoned. The fiscal year 2001 budget includes additional NHTSA funding to implement aggressive programs aimed at reducing drinking and driving.

Ensuring safe motor carrier transportation is a critical part of our overall efforts to improve highway safety. Historic levels of economic growth and logistical innovation have resulted in significant increases in truck travel. While the motor carrier fatality rate (relative to vehicle miles traveled) has decreased, the actual number

of fatalities has increased. That is not acceptable and the Secretary has set a goal of reducing motor carrier fatalities by 50 percent by 2009. With truck transportation a backbone of our economy, the management challenge facing DOT is to implement a risk based, systems approach that gets unsafe trucks and operators off our highways.

The new Federal Motor Carrier Safety Administration has already significantly stepped up its enforcement efforts. The number of Federal compliance reviews conducted has doubled since the beginning of 1999. The backlog of enforcement cases has been nearly eliminated. And, senior management of the Department is reviewing progress quarterly. We will be accountable for assuring that this effort succeeds.

To judge its progress in meeting this challenge, the new Federal Motor Carrier Safety Administration has set specific near term goals, including:

—deploying Commercial Vehicle Information System technology in 26 states by September of 2003;

—limiting the instances of negotiated settlement costs, so that violators of safety regulations will not view penalties as merely a cost of doing business; and

—pilot testing a new brake testing device by January 2001, in order to improve the efficiency and effectiveness of roadside inspections.

FMCSA also just launched a safety website to share detailed safety information with the public. Now each citizen can determine how safe his area is in comparison to the rest of the country. In addition, the Office of the Inspector General is continuing its criminal investigative emphasis on targeting parties which egregiously violate motor carrier safety standards.

Improving the safety of highway-rail grade crossings and pipelines also presents management challenges for the Department. Our ONE DOT management and our partnerships with states and local entities are the key to achieving results. FRA and FHWA work with state and community officials to raise awareness that the safest and most efficient way to reduce crossing collisions is by eliminating or consolidating highway-rail crossings. Since 1991, 12 percent of all public and private highway-rail grade crossings have been closed by states and localities, but our goal is to close a total of 25 percent by 2004 as trespasser fatalities represent over 90 percent of all railroad-related fatalities.

The accident last year in Bellingham, Washington revealed the need to comprehensively evaluate and improve pipeline safety. RSPA is committed to working with states to strengthen the pipeline safety partnership and to provide adequate resources to support pipeline safety activities. The fiscal year 2001 budget provides record resources to increase states' capabilities and builds on the cooperative actions RSPA has taken with the State of Washington. The $23.5 million we request in fiscal year 2001 includes funding for the base pipeline safety program, as well as damage prevention and risk assessment initiatives.

While recreational boating fatalities have fallen steadily for three decades, commercial fishing and passenger vessel safety provide formidable challenges in the maritime environment. The Coast Guard recently concluded a task force report and is pursuing initiatives in 2001 to bring fishing vessel safety in line with the rest of the commercial fleet. They are also partnering with the maritime response community and cruise industry stakeholders on numerous initiatives designed to minimize risk and maximize safety in the burgeoning passenger vessel arena.

AVIATION SAFETY

With growing congestion in the air and at airports, and with growing numbers of Americans traveling on foreign carriers, FAA faces challenges in maintaining the safety of aviation passengers and employees. We must be vigilant on all aviation safety issues, including runway incursions. The tragic Alaska Airlines Flight 261 crash reminds us of the importance of our commitment to making our skies—the safest in the world—ever safer. We are putting programs in place that provide countermeasures for known accident causes and will remain vigilant enforcing safety regulations.

The funding we request in fiscal year 2001 will help us move towards our "stretch goal" of an 80 percent reduction in the rate of fatal commercial aviation crashes by 2007. FAA's Safer Skies agenda focuses on the most critical safety problems in commercial and general aviation including loss of control, pilot decision making, runway incursions, passenger seat belt use, uncontained engine failures and survivability. In order to prevent runway incursions, FAA has set goals for heightened situational awareness for both pilots and controllers, and is providing training for controllers, developing procedural initiatives to prevent incursions, using more sophisticated statistical and trend analysis and fully implementing new technologies to better identify and prevent such incidents. In addition, FAA will be focusing on runway

incursion prevention around the country and will bring together all of those involved to identify airport-specific improvements.

FAA is also targeting safety resources to commercial air carriers based on performance information such as operator experience, safety trends and company growth. A total of $1.1 billion is requested in fiscal year 2001 for our aviation safety programs, six percent above this year's level.

Additionally, the Office of the Inspector General will continue its focus on investigating and prosecuting suspected unapproved parts (SUPs) where appropriate. The Department supports legislation to increase criminal penalties in the area of SUPs.

AIR TRAFFIC CONTROL MODERNIZATION

Modernization of our air traffic control system is important for both safety and efficiency reasons. Modernization is necessary to keep pace with improvements in technology and to accommodate air traffic growth. As aviation grows, FAA needs ever more sophisticated equipment and procedures to prevent additional delays. The economic impact of delays is substantial and must be controlled. Given this demand, we also have to recognize that modernization of complex systems presents challenges in maintaining schedule and cost discipline.

FAA has been faced with both successes and failures in its modernization efforts. Some programs such as the Display System Replacement and Free Flight Phase I are being accomplished within cost and schedule baselines. However, FAA has an unacceptably high rate of schedule slips and cost growth for its major modernization programs. FAA has faced problems with both the STARS and WAAS developments largely because these are technically complex programs that require more software development, and must be able to support the high standards of performance FAA demands from its workforce and equipment. To minimize problems with future projects, FAA is more intensively monitoring programs to stay within baselines, requiring more up front human factors analysis, and developing new projects in smaller increments.

A total of $2.5 billion, 22 percent more than this year, is proposed for FAA's capital modernization program in fiscal year 2001. You need to be assured that these dollars will be spent wisely. FAA has a number of initiatives underway to help it meet this assurance. The FAA has baselined most major projects, so that progress against planned performance can be quickly measured. FAA is also using Earned Value Management for all new large acquisition projects and is awarding contracts more quickly, through its new acquisition management system.

In addition, FAA has set two important modernization goals. One, is to keep at least 80 percent of contracts within 3 months of their schedule baseline. The other is to keep costs within 5 percent of baseline for the 20 largest acquisition projects.

FAA FINANCING AND REAUTHORIZATION

Given the recent action on FAA reauthorization, it appears that the Administration's goal for FAA financing, which was to move FAA to a user fee financing system within a performance-based organization, will not be met at this time.

Nevertheless, FAA is on target to implement a cost accounting system throughout the agency in fiscal year 2002 and received an unqualified audit for fiscal year 1999. The cost accounting system will allow FAA to comply with the court order on overflight fees and develop fees in line with FAA costs. The cost accounting system also will help FAA have the information it needs to evaluate its financial goals and maintain fiscal prudence.

SURFACE, MARINE AND AIRPORT INFRASTRUCTURE

One of the major goals of the Department is to improve the overall conditions and performance of our transportation system. Much of the progress toward this goal relies on improvements in the infrastructure itself and the way it is integrated throughout the transportation system. The Inspector General has identified a need for the Department to identify and apply best practices of major infrastructure projects and to enhance the monitoring of project performance and finance plans.

The Department is comprehensively dealing with the need to substantially increase our monitoring of major projects. We saw the need to do this recently with the Central Artery project, where the FHWA approved a finance plan for this project on the very same day that the state of Massachusetts announced increased costs for the project. This is not acceptable and the Department has laid out an action plan for a complete review of this situation. The Federal Transit Administration will increase its oversight of transit projects by five percent in fiscal year 2001. In addition, the Office of the Inspector General has implemented a program to heighten vigilance for fraud at the state and federal levels.

The Department believes the integrity of our nation's Maritime Transportation System (MTS) is important to the Nation's economy. Trans-ocean shipping supports the majority of the United States' global commerce, and secure ports and harbor facilities are essential to ensuring the safe, efficient transfer of goods between waterborne vessels and highway and rail routes. Our recent MTS report, developed with significant collaboration from private and community stakeholders, provided recommendations to ensure the MTS meets the future needs of the American economy.

Regarding airport revenue diversion, the FAA has implemented all of the revenue use enforcement provisions in the Reauthorization Acts of 1994 and 1996. The FAA issued a comprehensive final policy on the use of airport revenues after extensive public and industry comment. FAA compliance staff review the annual financial reports filed by commercial airports and follow up on potential compliance issues. Local government airport sponsors are also required to review airport revenue use as part of their annual audit of Federal programs under the Single Audit Act. FAA, in coordination with the Office of Management and Budget and the General Accounting Office, has issued detailed guidance to auditors on the conduct of those reviews. These actions, in addition to the FAA's continuing education and outreach to the airport community, serve to continue the dedication of airport revenue to airport purposes.

TRANSPORTATION SECURITY

It is critical that our transportation system be safe and secure. Even though the most visible security issues occur with the FAA and Coast Guard, several administrations within DOT are increasing their efforts on transportation security issues throughout the transportation system.

This year, the OST Intelligence and Security Office is working with the transportation industry to develop a mechanism for quick dissemination of security threats. In addition, the fiscal year 2001 budget contains funding for transportation risk assessments, which the IG has recommended that the Department conduct.

The security of our aviation facilities, specifically our airports, is a top priority of the Department. FAA has implemented all of the recommendations of the White House Commission on Aviation Safety and Security. However, we still face the management challenge of developing comprehensive procedures, technologies and measures of effectiveness to minimize the possibility that unauthorized persons gain access to restricted areas at airports. FAA research in fiscal year 2001 will be aimed at improving the speed and effectiveness of weapons and explosive detection devices to protect travelers from potential terrorist actions. FAA is also developing a regulation to stiffen the security procedures that prevent unauthorized access.

COMPUTER SECURITY

Not surprisingly, DOT's critical information technology assets reside within FAA and the Coast Guard, with no other DOT systems meeting the criteria of Presidential Decision Directive 63. Plans to evaluate, remediate, test and certify these systems in accordance with existing Federal IT security policy and guidance are now under development. Risk assessments will be conducted for these systems, with our goal of completing all risk assessments by November 2002. We also plan to have all remediation and testing of these critical systems completed by May of 2003. Steps are being taken now and efforts will be accelerated to improve detection of potential intruders in our computer systems and prevent them from damaging our systems. In addition, physical security is being improved to deny access to critical facilities.

In addition to our actions on our critical systems, DOT has worked vigorously to ensure the security of other systems. For example, my office completed a recertification last year of all accounting system users to ensure they were current and authorized personnel. The CIO's office established an IT security policy that requires all DOT IT systems be assessed to identify vulnerability, evaluate and mitigate these where justified, and then test and certify that adequate protection has been implemented. The CIO's offices will provide IT security awareness training to all of our workforce this fiscal year. And, we have set goals to develop an overall strategy/plan for ensuring that our IT assets are in compliance with OMB Circular A–130 by March 2001 and to assess, test, and certify no less than 25 percent of our noncritical IT assets by September 2001.

We have requested $100 million in 2001 to allow us to proceed vigorously to address critical infrastructure concerns Department-wide.

FINANCIAL ACCOUNTING/CHIEF FINANCIAL OFFICERS ACT

I am most pleased to report that all DOT's fiscal year 1999 financial statements (the Consolidated Statements, the Highway Trust Fund statements, and the FAA Statements) received unqualified opinions from the Office of Inspector General. An unqualified opinion means that the financial statements meet accounting standards and all major dollar amounts are supported. This marks the first time that ALL DOT financial statements received unqualified opinions. This happened because numerous people in various financial, program, systems, and audit organizations worked together. It epitomizes the ONE DOT philosophy.

Financial statements, in general, are an important tool to promote and improve accountability and stewardship over the public resources entrusted to the Department. With the results of this year's statements, the Secretary now knows that:

—DOT's financial statement fairly represents its financial position and results of operation;

—DOT has a serviceable internal accounting and administrative control structure;

—DOT has complied with laws and regulations;

—DOT's Management Discussion and Analysis, which addresses goals and program results, is consistent with the financial statement information; and

—DOT's performance measures are supported and properly reported.

Following the fiscal year 1998 audit, DOT needed to resolve several major issues to receive an unqualified opinion on its fiscal year 1999 financial statement. But the major outstanding departmental issue was valuation and supporting documentation for property, plant, and equipment. FAA and USCG own most of DOT's property and equipment.

When the President announced in May 1999 the goal to have an unqualified audit opinion on the Federal Government's fiscal year 1999 financial statements, both FAA and USCG responded by developing plans to address the fiscal year 1998 property, plant, and equipment deficiencies. The plans covered three fronts: Real Property, Personal Property, and Work In Process (WIP). The OIG was instrumental in the success of the effort. Throughout the planning and execution, the OIG identified the types of accounts to be covered and the types of documentation that were acceptable; examined documentation supporting acquisition cost and accumulated depreciation; and, used a combination of statistical sampling, nonstatistical sampling of high-dollar items, and extensive testing to examine each major account of the property, plant, and equipment line item. The OIG reviews were conducted throughout all nine FAA regions. From the OIG perspective, the $10.8billion reported by FAA for its property, plant, and equipment is fair and reasonable as of September 30, 1999. This could not have been accomplished without the excellent partnership we have with the Inspector General.

DOT is moving aggressively to update its aging financial system with Delphi, a commercially available, off-the-shelf financial application. It is scheduled for full implementation in fiscal year 2001. All DOT entities are cooperating in its implementation. It will provide DOT with a solid financial system for sound financial management reporting. Delphi will have built-in capability to produce all the financial and budgetary information for preparing our financial statements.

Although FAA was able to support the cost of its property, plant, and equipment accounts by using alternative procedures and labor-intensive methods, we recognize that the deficiencies in its existing property systems still represent a material internal control weakness. Although FAA is making changes to its existing systems, FAA recognizes that it needs a better property management systems environment and has taken the following steps:

—In fiscal year 2000, FAA has initiated action to implement the Oracle Fixed Asset Module to consolidate all its property assets, to compute depreciation, and to maintain a record of changes to the financial information on its assets.

—In fiscal year 2001 and beyond, FAA will initiate actions to provide an integrated solution to its financial and property management accountability through an Asset Supply Chain Management (ASCM) program that will be compatible and fully integrated with the Department's Delphi system.

It is not sufficient to simply get an unqualified opinion. We must also assure that the systems are in place to make this the norm in the long run.

AMTRAK FINANCIAL VIABILITY AND MODERNIZATION

The 1997 Amtrak Reform and Accountability Act mandated that Amtrak develop a plan to eliminate its need for Federal operating support by 2003. Amtrak is making progress toward its goal of operating self-sufficiency by 2003, but it still faces significant management challenges toward reaching this goal, and the next two years are critical.

Amtrak has increased ridership for three consecutive years—ten percent since 1997 demonstrating that many Americans continue to want intercity passenger rail transportation. In 1999, Amtrak increased its commercial revenues by 16 percent. Meeting the operational self-sufficiency goal can be achieved by continuing this ridership growth and increasing revenues, a significant management challenge.

DOT is committed to supporting Amtrak as it progresses toward operating self-sufficiency. High-speed rail service in the Northeast Corridor and improvement to intercity passenger rail service nationwide are key investment strategies that we will pursue to help Amtrak meet this goal. We expect Amtrak's financial performance to continue to improve as a result of the introduction of the Acela Regional service on January of this year and Acela Express service on the Northeast Corridor later this year.

The fiscal year 2001 budget proposes a substantial investment in passenger rail service, building on the growth in ridership and ability to cover operating costs that our Northeast Corridor investment has supported. Many state governments have invested in passenger rail service, including high speed rail, and Federal funding will provide the foundation for it to be a significant transportation solution for the future. We propose $468 million for this new program, in addition to continued Amtrak capital funding to expand Amtrak's intercity passenger rail service, including improvements necessary for high-speed rail service and other increases in average speeds through rail infrastructure improvement.

The Department will use funds under this new program to fund such improvements made by Amtrak and/or a State or consortium of States. Project funds would go towards the acquisition of right-of-way, and planning and design. Expanded intercity passenger rail service can and should play an important role in improving mobility.

COAST GUARD DEEPWATER CAPABILITY REPLACEMENT PROJECT

The Coast Guard has embarked on a long-term project to systematically replace or modernize the assets it uses for its Deepwater missions—generally speaking, those that occur more than 50 miles offshore. This past month, the President's Interagency Task Force on Coast Guard Roles and Missions issued their report, concluding that the Coast Guard is a national asset and that the nation needs a viable, well-equipped Coast Guard to carry out its 14 statutorily mandated missions performed in the Deepwater environment. These missions include drug interdiction, illegal immigrant interdiction, and fisheries law enforcement. The assets the Coast Guard needs to replace include cutters, aircraft, and sensors a system of equipment that gives the Coast Guard its ability to protect our borders and ensure the security and sovereignty of our nation.

The Coast Guard is planning for the replacement of its Deepwater capability as an integrated system rather than a series of distinct procurements. Using a unique mission-based performance acquisition strategy, this largest acquisition in the Service's history is setting a new standard for project management and was designated a Reinvention Lab this past year. While there will be many management challenges facing the Coast Guard with this effort, the Service has shown throughout the early stages of this project its ability to effectively plan and manage this acquisition, which could take up to 20 years to complete.

The Coast Guard has aggressively worked to minimize project risk and achieve the efficiencies of a systems approach. First and foremost, during the design phase, the Coast Guard is engaging in collaborative communications with all three contractors, to ensure that the final design submissions answer all major issues. The project has also developed an extensive and flexible Risk Management Plan that strives to identify specific risks then develop mitigation strategies to deal with them far in advance of any adverse impact.

The three industry teams currently under contract will submit their final proposals by July 2001. At that time, the functional designs will be approximately eighty percent complete and will provide the Coast Guard with a level of design and cost detail necessary to help mitigate acquisition risk. We believe that the Coast Guard's deepwater approach will produce a system of tools that will maximize the operational effectiveness of the Coast Guard while also minimizing the total ownership cost of the system.

SHIP DISPOSAL PROGRAM

Even though not within the specific jurisdiction of this Subcommittee, the Maritime Administration must dispose of government-owned, obsolete merchant and non-combatant vessels in the National Defense Reserve Fleet (NDRF). Since 1994, MARAD has refrained from exporting these vessels because of concerns about the

environment, worker health and safety. As a result, DOD has incurred additional costs to maintain the ships prior to their sale and disposal in the U.S., where there is only a small domestic ship scrapping industry.

The Federal Government faces challenge in disposing of its obsolete vessels in a timely manner. In fiscal year 1999, the NDRF contained 112 vessels designated for priority disposal. MARAD's goal is to reduce the inventory of obsolete vessels and is working to determine a viable, legal way to do so.

GOVERNMENT PERFORMANCE AND RESULTS ACT IMPLEMENTATION

The Department is now preparing its performance report for 1999, the first to be submitted under GPRA. The IG expressed concern that the Department would not have all of the data available to report on its performance results. The Department will have over 90 percent of the data elements available either in final or preliminary form. Therefore, the Department will be able to honestly report on its 1999 performance by the March 31 deadline.

CONCLUSION

Working in close cooperation with the Inspector General and the Congress, last year the Department was able to make progress on many challenging issues. These include the Department's first unqualified financial audit, a ONE DOT program evaluation of our hazardous materials safety efforts, and our successful Y2K conversion efforts.

STATEMENT OF SENATOR ROBERT F. BENNETT

Senator SHELBY. Senator Bennett, do you have any comments, opening statements?

Senator BENNETT. No, Mr. Chairman. I appreciate the opportunity to be here, and I thank everyone for the kind words that they are giving me with respect to Y2K.

Senator SHELBY. You earned them.

Senator BENNETT. I am reminded of the comment Bob Hope made. He used to travel around the world at Christmas time, and he said, you know, the Army really must hate me because every time I go out, they give me all these shots. And it is completely worthless because I have never gotten sick at all. I kind of have that feeling with respect to Y2K. A lot of people say, gee, you got us all excited, and look, there was not any problem.

So, the real tribute goes to people like those at the table who did the actual work. All we did was hold a few hearings.

Governor Thompson, I cannot pass up the opportunity to reminisce a little. Members of the subcommittee know that at one point I sat at the same table as an employee of the Department of Transportation in the Nixon administration. I have in my file a letter from Secretary Volpe congratulating me for lobbying through the Congress—my job was the head of congressional liaison, congressional relations within the Department—the bill that created Amtrak in the first place. And I, in mea culpa, full confession, here acknowledged that I promised the Congress that Amtrak would be financially self-sufficient within 3 or 4 years. That was in 1970.

As I sit here and listen to you say you are going to be financially self-sufficient in 2003, I say to you thank you for finally validating a promise that I made 30 years ago that has not come true in that 30 years.

I think there is no question but that we need high-speed rail service in certain parts of this country. I am a little less convinced that we need it in a national network. We have an awful lot of space out in the West that is best covered by air. We have got Amtrak service in Utah but the trains arrive at about 2 o'clock in the

morning and they come three times a week and they have maybe 15 people on them. I am not sure that is the very best way to proceed.

But certainly seeing what can be done in the more heavily populated corridors of the Nation and how this becomes a very intelligent alternative to air certainly in the Boston-Washington corridor and so on—I have taken Amtrak there. I am delighted it will get better and faster, and I would be delighted to be on that train with you that you described.

Governor THOMPSON. You are invited, but I promised the engineering duties to Senator Lautenberg and Senator Shelby, so you will have to be a passenger with me.

Senator BENNETT. You are very wise to keep me out of the train driving business.

I appreciate your enthusiasm, and on behalf of the country, I thank you for the zest that you bring to this particular challenge.

That is all I have.

Senator SHELBY. Senator Gorton, do you have any comments, opening statement?

STATEMENT OF SENATOR SLADE GORTON

Senator GORTON. Well, I am late here. And I am not going to repeat anything else, except perhaps what I have heard from Senator Bennett. I must say I have about the same faith in Governor Thompson's promise of black ink as I would have, I trust, in 1970. I do not think it is going to happen in spite of all of his greatest efforts.

I also share Senator Bennett's views that we have to look at this whole problem quite differently in different parts of the country. The Boston-Washington corridor, a corridor in which obviously Senator Lautenberg has the greatest interest, from my perspective is an area in which rail passenger service is absolutely vital and has a very real promise to be self-supporting.

About 3 years ago, one weekend in going home, I flew to Chicago and took the Empire Builder to Seattle. It was absolutely full and I am sure it was losing $50 a passenger. Absolutely full. It was very difficult for me to see those long-haul routes being any part of a major, necessary transportation system in the United States.

I was encouraged, however, by reading recently that at least on one of the more southern routes, what Amtrak is going to do is to try to—I guess the best way to describe it would be land cruise ships. If Amtrak can create a luxury experience for tourists to enjoy the United States and stop pretending that it is really a competitor to airlines or something of that sort, there may be some promise. Many of those routes are interesting to travel, but the kind of equipment that Amtrak is using—it was a very frustrating ride for me. It was not a good tourist experience. And obviously, it was not a particularly efficient way to get from here to Seattle. But imagination seems to be gaining a little bit of ground at least in Amtrak, and I hope that its managers go ahead with it. But I am not holding my breath until it is operating in the black.

Senator SHELBY. Thank you.

Senator Kohl, do you have any comments?

STATEMENT OF SENATOR HERB KOHL

Senator KOHL. Yes, I have a brief statement.

Mr. Chairman, I thank you for providing this opportunity to discuss Department of Transportation management issues here today. Although I am not able to stay this morning, I do want to offer brief comments on Amtrak and welcome Governor Thompson and Messrs. Basso, Mead, and Warrington. It is heartening to have the interests of my State and the Midwest well represented here with Governor Thompson.

Half a million Wisconsinites ride Amtrak. We also have ambitious plans to develop high-speed rail in the Midwest and commuter rail in southeastern Wisconsin. Clearly, we are counting on both reliable and efficient service, and smart, sound management at Amtrak as we work to reach these goals.

It is good to be addressing today the question of how Amtrak will grow rather than mourning lost services as we have in the past. It was not so long ago that the Governor and I had a fight to save Wisconsin's Hiawatha service between Chicago and Milwaukee.

Now we are learning of Amtrak's plans to expand routes to Fond du Lac and Janesville, Wisconsin. Times and the nature of these hearings have certainly changed, but we must temper our high hopes for Amtrak's future with sound business sense. The burden is on you to prove that the new routes in Amtrak's bottom line do not compromise reliable service on all routes and are part of a balanced national transportation strategy that also includes road and air travel.

This year we have an administration request for a new high-speed corridor account in the amount of $468 million. This too holds potential for the Midwest, but it also demonstrates the significant budget challenge that we face. The funding for the high-speed rail proposal comes from the so-called RABA funds that are promised for highways and bridges. And yesterday we approved an aviation bill that increases airport capital funds by roughly 60 percent, an increase that will compete directly with the high-speed rail money.

So, simply put, the challenges are greater for all of us. We need to stay the course on the road to self-sufficiency, and we need to work even harder to make sure that our transportation investment remains in balance.

Thank you again for coming to speak with us today. We look forward to working with you as the appropriations process continues.

Senator SHELBY. Thank you.

Mr. Mead, over the years, we have spent a great deal of time talking about aging and inadequate infrastructure. I was informed recently, today, of a self-proclaimed critical piece of aging transportation infrastructure that has been poorly, some would even say negligently, maintained. Of course, I am talking about the minority clerk of the Transportation Subcommittee, Peter Rogoff. I am told it is his 40th birthday today and that there is no better place he would rather be than at this hearing. That by itself warrants an investigation, Mr. Inspector General, by your office. Do you not agree?

Mr. MEAD. Knowing Peter, yes, sir.

Senator SHELBY. Peter, happy birthday.

Senator BENNETT. Happy birthday.

Senator SHELBY. Senator Lautenberg, I know you have got a Budget hearing.

Senator LAUTENBERG. Thanks for taking care of Peter for me.

Senator SHELBY. Well, he has got to take care of that infrastructure.

OPERATIONAL SELF-SUFFICIENCY

Senator LAUTENBERG. He has got to be the continuity on this, so we wish him well.

I just want to respond to the comments of my colleagues here. We are talking about self-sufficiency. We are talking about a rather ambitious quest because we are discussing, A, operational self-sufficiency. We are kind of embarrassed that we have to defend the fact that this railroad will be the only one in the world that does not require subsidy from Government. In West Germany, they are going to spend $70 billion on high-speed rail service in 10 years—$70 billion. So, in our country we have spent over $85 billion on aviation plus the PFC's which bring that sum up substantially. So, that is our mission.

And while Senator Gorton noted that my interest is primarily in the Northeast, I must say I genuinely believe that high-speed rail service, maybe not of the type and the length of journey that Senator Gorton described, is an essential factor around the country. All of us have had the opportunity to travel this great Nation and whether it is high-speed rail service out of Chicago, Milwaukee, et cetera, or whether it is on the West Coast—and I know that work is going on in some of the States on the West Coast to try to bring high-speed rail service—or the Southeast or the South, all of these have piqued the interest. Seattle to Portland, et cetera. So, this is not just give it to the East.

But I will say this, that when the Northeast has air jam-ups and we are behind schedule, it affects every major airport in the country whether it is Seattle or Los Angeles or San Francisco. You name it. And we just cannot squeeze more. These airport incursions that Ken Mead mentioned are happening and they are frightening. The result there of an accident can be quite substantial.

But we are bent on this not because I—like I said when we initiated the Boston to New York service, that as a child I came from a hardworking but very modest income family, and I had always wanted electric trains and I never got them. And now I am really getting a big set, and I am excited about it.

But there is more to it than that. I genuinely believe that unless we pay attention to the development of rail service that is efficient, high-speed, that we will be dooming ourselves to congestion and delays and pollution all over this country. We all agree we cannot do more on highways. But people fail to understand that as big as that sky is, there are limitations. We cannot get the airports. How many of us have experienced—and I can tell you between Washington and New York, it has happened frequently—where the wait to get a gate is longer than the amount of time it took to fly from place to place?

So, we are deluding ourselves if we think that we can just continuously expand this aviation system. People do not want them in their neighborhoods. They do not want to listen to the noise. They do not want to listen to the clutter. People are tired about missing appointments and missing connections and things of that nature.

So, we are working on something that I think really deserves the support and full attention of our Government. I hope that we will continue to give Amtrak a chance to develop.

RIDERSHIP INTEREST

In the next couple of years, we will see what happens in terms of ridership interest. One of the questions I was going to ask Governor Thompson was the ridership increase, Mr. Chairman, between Boston and New York that has exceeded all of the projections, as a matter of fact, is up over 60 percent in just a couple of months.

Governor THOMPSON. 64 percent.

Senator LAUTENBERG. 64 percent.

So, there is a hankering out there for high-speed rail and I hope we will be able to satisfy it.

I thank all of you. I have worked with Ken Mead and Peter Basso and George Warrington and the Governor for some time now.

This likely being my last hearing for Amtrak, Mr. Chairman, I thank you for your consideration and patience as we discuss Amtrak. I know maybe it may be an overly discussed subject sometimes, but you have been very good about it.

Senator SHELBY. Well, I am waiting for those hourly trains to come through from Atlanta and New Orleans through my part of Alabama where I can ride it. Right, Governor?

Governor THOMPSON. That is right, Senator. We are coming.

Senator SHELBY. I know, I know.

Governor THOMPSON. We just need your help.

AMTRAK FUNDING

Senator SHELBY. Mr. Secretary, you and the Inspector General have questions. It may be more of a statement first.

Last year the administration's 2000 budget proposed to divert funding from the highway firewall into the transit account, the rail account, and the highway safety account. There was an immediate and strong negative reaction from Congress to this proposal. These funds were guaranteed for highway construction under TEA–21 and there was absolutely no interest in undoing that agreement.

Yet, the administration's 2001 budget proposes to do exactly the same thing again; that is, divert $600 million from this fund, revenue aligned budget authority, to non-highway purposes. The administration has identified $468 million of this proposed transfer for passenger rail.

Perhaps that is more than a statement, but it is clear to the Secretary that this proposal to divert highway funds for non-highway purposes is dead here in the Congress, dead on arrival, the same proposal as last year.

Mr. Mead, as a follow-up to that question, your staff has worked closely with Amtrak on an independent assessment of the railroad's

financial outlook. In this oversight work, what Federal funding level does Amtrak assume in fiscal years 2001 and 2002?

Mr. MEAD. We have consistently used $521 million.

Senator SHELBY. It is a lot of money, is it not?

Mr. MEAD. Yes. It seems like it to me anyway.

Senator SHELBY. Governor Thompson, I think it is fair to say that a lot of people were surprised by last week's announcement of Amtrak's market-based network analysis and associated network restructuring plans. This was a widely expected result and recommendations for route restructuring and elimination. It is well-known that all but one of Amtrak's 40 routes lose more than they make in revenues. Some lines lose more than three times as much as they generate in revenues in a year. But what was announced last week was a service expansion plan with no route eliminations or decrease in labor costs.

Amtrak believes it can increase its revenue through adding routes and trains and increasing its mail and express business. Maybe so. I hope so. This approach is not responsive to the intent of the Senate Appropriations Committee which directed, in the fiscal year 2000 report language, that Amtrak's MBNA will analyze different service alternatives, including route restructuring and modifications, frequency changes, route expansions, and route eliminations. Nor is this approach responsive to the letter that Chairman Wolf and I sent to George Warrington, President of Amtrak, last April 28 in which we directed that MBNA analysis must consider a full range of options including route elimination and rationalization.

What is going on, Governor?

Governor THOMPSON. Thank you very much, Senator Shelby. You are absolutely correct. Now let me tell you what we did. Until now, Amtrak had never gone through a detailed analysis of every route and every piece of equipment. So we spent the last 15 months going through every route and every piece of equipment and every service and found out how we can make it more profitable. How could we make it more passenger friendly? How could we do a better job?

We determined that for several years Amtrak has tried to shrink itself into self-sufficiency or profitability, and it did not work. Just because you reduced the number of services and restricted the amount of passenger services, you still had the fixed costs. So, we asked, how can we grow this railroad and increase the revenue and increase the number of passengers. We did this by looking at each route, and we found ways that we could improve it.

For instance, at Meridian, Mississippi, we are going to split the train. We are going to use part of the train to continue on south, but part of the train will go east and west, and increase the passenger service, as well as the opportunity for mail and express.

The Texas Eagle. We found ways that we could go 7 days there, pick up more passengers, as well as mail and express contracts that would allow us to earn more money.

Overall our MBNA is going to bring in $65 million to the bottom line by fiscal year 2003.

We also did something else. We went and reached agreements with the freight railroads, as well, on mail and express. We said,

you know, we have been fighting you for a long time. How can we cooperate? Is there a way that we can carry some of your load, and make it more profitable for you, and also bring some money into Amtrak? We are sitting down and negotiating and we have reached agreement with many of the freight railroads. So, they are giving us some express to haul. You know, 5 years ago, they would have fought us. Now, they are contacting us and giving us some of their business. As a result, we are both making money.

There is more than $8 billion of refrigerated produce that is being transported across the country. We have looked into it and found that we can have rail passenger cars bringing refrigerated produce from California to New York. So, we are going to develop a new route from California to New York on produce and passengers. We think we can cut into that $8 billion business. We have got commissions set up——

Senator SHELBY. Can you do it faster?

Governor THOMPSON. We can do it faster and more reliably. We think we are going to have a really nice little cash infusion from this business.

Overall, the MBNA is going to bring us $65 million more than what we have right now.

Senator SHELBY. But will you also have a stand alone route elimination analysis prepared?

Governor THOMPSON. We already did that.

Senator SHELBY. You have.

Governor THOMPSON. We have.

Senator SHELBY. Do you not think as you look at the whole picture, you have to, as you want to grow things—and that makes sense—grow revenue and promote routes——

Governor THOMPSON. I think George wants to answer that one.

Senator SHELBY. George, do you want to get in on that?

Mr. WARRINGTON. Yes, Mr. Chairman. The MBNA work really was an examination of every single route that the company operates today and every single segment and every city that is out there today.

REACH AND CONNECTIVITY

You may recall in 1995 Amtrak went through a very difficult series of truncations and terminations of all or portions of routes. In the end, because of the fixed cost and overhead cost nature of the business, what you find is that unless you eliminate the entire system, as a practical matter, the costs you are able to eliminate in connection with incremental service reductions do not come close to the amount of incremental revenue you lose associated with the termination of the service. The freight lines figured this out a long time ago, which is why reach and connectivity are critical elements underpinning the kind of planning work that we have done.

We did the take-out analysis on every segment——

Senator SHELBY. Elaborate just a minute on the phrase you just used, "reach and connectivity." I think that is important.

Mr. WARRINGTON. Yes, and this is underpinned with a lot of market research, Mr. Chairman. What our research tells us and what our models confirm is that the more you reach more markets, the more connectivity the system provides—and Dallas-Fort Worth is a

good example of where we are creating that kind of opportunity. Running a 7-day a week Texas Eagle to Dallas-Fort Worth, extending a Crescent from Atlanta-Meridian-New Orleans to Dallas-Fort Worth. The synergy that provides, along with our new Oklahoma service from Oklahoma to Dallas-Fort Worth, the potential opportunity to also run an extension of that Eagle to Monterrey, Mexico, in part driven by passenger demand in Laredo and in part, frankly, by express markets like auto parts moving from Delaware and Detroit and Chicago to assembly plants in Monterrey, Mexico—the combination of the synergy that you create and, in addition, rerouting our Sunset Limited, which runs from Jacksonville to Los Angeles, rerouting that north of Houston, bypassing actually several smaller markets that are currently being served in south Texas and tapping into the Dallas-Fort Worth market and the Abilene market in west Texas. Where the size of our reach is about 300,000 customers, compared to 30,000 customers in south Texas, when you put it all together, you have a much more attractive system not only for passenger business, but for mail and express business.

And the Postal Service will tell you that as well, that we are a much more attractive carrier of not only periodicals, but also second class and conceivably first class mail, if we have better reach and better frequency to markets that they need to have served.

All of that enables us to secure more revenue that we can contribute to the bottom line, although we are not necessarily profitable on every train across the entire system. I use as an example Continental Airlines. Continental is Newark Airport's, New Jersey's, dominant carrier. I will guarantee you that every plane feeding Newark airport is not making money for Continental, but it is feeding a network and feeding a system. It is the same basic concept, Senator.

Senator SHELBY. Senator Bennett?

Governor THOMPSON. Senator Shelby, if I could just quickly add.

Senator SHELBY. Yes.

Governor THOMPSON. But at the same time that we are doing this, we are also asking the States to step up.

Senator SHELBY. Absolutely. Well, they have to step up.

Governor THOMPSON. They have to. And the States are coming in and back-filling some of these routes to the tune of about $300 million a year.

Senator SHELBY. Senator Bennett.

Senator BENNETT. Thank you, Mr. Chairman.

I am delighted with this conversation. You are actually starting to run it like a business.

Governor THOMPSON. Yes, we are.

Senator BENNETT. Again, from the historic perspective, a lot of the original support for Amtrak came from people that I would describe, not in a pejorative sense, as hobbyists, people who just had a great love for the romance of train travel, and they wanted to make sure that passenger train travel did not disappear. So, the whole focus was on preserving the romance of being on a train.

There was a clear divorce between passenger travel and freight. The freight people wanted out of the passenger business so badly, if you remember the history, they subsidized Amtrak in the very beginning. They paid to get out. A lot of the original capital forma-

tion of Amtrak, or Railpax, as we called it in those days, came from literally ransom payments made by the freight lines to say, get us out of this business. We want absolutely nothing to do with it. It had been a tremendous loser for a long time, and the railroads were in real trouble and this was a way that they would get out from under the albatross.

To be talking now about competing for some of their business, about competing with trucks for some of their business is a very heartening kind of thing. Instead of focusing strictly on the romantic and nostalgic view of the kind of train ride that Senator Gorton described, which you take if you are retired and have the time, to say, okay, we will move refrigerated goods, we will move packages that might compete with Federal Express—the same kind of problems getting in and out of airports apply to Federal Express as apply to a passenger—is a very heartening development. I have not heard this kind of conversation on this issue before. Maybe I just have not attended the right hearings, Mr. Chairman, but to hear this kind of dialogue is just really quite exciting to me. I want to congratulate you all on your willingness to do this.

Again, a piece of historic perspective. It was not air travel that killed rail passenger in this country. It was the interstate highway system. Ninety-eight percent of city-to-city trips for passengers are taken in the automobile. So, for you to start talking about competing with the interstate highway system by taking things that are currently going by truck and saying we can put them on our high-speed trains and get them there faster and cheaper than the trucks can is, I think, a very farsighted point of view. You are going to where the competition really is, and that is something any businessman needs to do.

So, just keep it up. More and more of this kind of thing I think is terrific.

Mr. MEAD. I would like to offer just a perspective on that going back in time a bit. Amtrak for years thought that it was supposed to stay away from the freight business except for hauling mail. Now, Amtrak is getting into niche markets. So far, they have not made the truckers or the freight railroads angry in terms of cutting into their business. If they do start to get angry, their first broadside will be, this is unfair because Amtrak is receiving a Federal subsidy, and whether it is called a capital subsidy or an operating subsidy, I am not sure that the competitors will appreciate that distinction.

Governor THOMPSON. Senator Bennett, just quickly. Thank you very much for your comments. I really appreciate it and I really appreciate, as Chairman of the Board, to hear your historical perspective. I did not know all of these things. I learned a lot this morning listening to you, and I thank you for that.

This past year we have picked up $100 million of mail and express for Amtrak, and that is just the start. We are expecting to expand that.

Ken Mead said it correctly. We sat down with the freight railroads. You know, we used to fight all the time. They could not stand us; we could not stand them. And we would come running to you to solve it. But George Warrington and this board decided why fight. Let us go see how we could cooperate.

So, we have quarterly meetings. George meets with the freight railroads, and I meet with them once a year. And we meet with the freight railroads and say we are going to be here. Can we work together? How can we help you and how can you help us be more on time? And how can we both make some money out of the proposition? And you know something? They like us a lot better. They still do not completely trust us, but they like us a lot better. They are talking to us and we are communicating. That is helpful.

The refrigerated car business—the roads are too congested, so we decided to try it. We are going to try it and we are going to go from California to New York and transport produce. We think it is a niche market that can pick us up a lot of money.

We are also going to make an agreement with UPS and some of the other people about express. That is the kind of business that we need.

Quad Graphics is a big printing company. We are hauling all their periodicals and distributing their periodicals, and we are making good money on it. That is what we have to do.

We are trying to run this railroad like you would run a business. We have completely changed our philosophy and our direction, and we are going to keep doing it till we make you proud of it.

Senator BENNETT. Well, you may get to your goal by 2003 with that kind of attitude.

In the spirit of Senator Gorton, let me just share one personal experience with you that I think summarizes where we are. My wife and I some years ago went to Great Britain. I had lived in Great Britain for 2 years in my early 20's on a church assignment. My son was there finishing up his church mission. We went back to pick him up. Like all tourists, we rented a car. It took me a little while to get used to driving on the funny side of the street. But we drove around Great Britain and saw all the sites, and I went to all the places that I had visited as a young man. And our son took us to places. It was wonderful.

After about 4 days of that and our schedule called for us to be back in London to see some shows and do the kinds of things you do in London, I was kind of tired of that little car. We found a Hertz place and checked the car in and got on the train. And we got to London so fast by comparison that my wife said, what have we been doing in the car the whole time we have been here?

Well, we had been touring. It was a logical kind of thing to do, but when the time came that you wanted to move quickly, we moved to the train.

I think that is a paradigm for where we may go here. In my own State of Utah—Mr. Basso, of course, knows Utah's transit problems backwards and forwards. He lives with them. I think he is probably sick of hearing from people from Utah. From Provo to Ogden now, you have got about 80 percent of the State. We are thought of as a rural State. We, Mr. Chairman, are probably one of the most urbanized States in the country. The highway traffic from Provo to Ogden now is a long schlep. If you do not do it at exactly the right times of day, it can take you time. They are saying, well, if you can get a high-speed connection—now, this clearly does not belong in any Amtrak national plan, but if you can get a high-speed commuter rail from Provo to Salt Lake to Ogden, a lot of folks would

get out of their cars just to have the same kind of experience we had in Great Britain, to say if I want to go as a tourist, I will take the car. If I want the convenience of being able to get off and do the kinds of things we did, I will take the car. If I just have to get there to a business appointment, speed is the all important thing, amazingly rail will come back because your competitor is not the airplane. Your competitor is the highway. And as highways get congested, the train becomes more and more attractive.

Governor THOMPSON. You build it. We will operate it.

Senator BENNETT. Okay, very good.

Senator SHELBY. Thank you.

ADDITIONAL COMMITTEE QUESTIONS

I have a number of written questions that we would like to submit to you for the record. You have always been courteous enough to answer them fully.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

AMTRAK ACELA DELAYS

Question. I understand that the Acela Express high-speed service, originally scheduled to begin by the end of calendar year 1999, has been delayed until July of this year, a delay of at least 6 months.

What are Amtrak's remaining challenges to meeting the new start-up date of July 2000? Are they going to make it?

Answer. Amtrak currently anticipates beginning Acela-Express high-speed passenger service in the Northeast Corridor in July 2000, about 7 months later than originally planned. The delays thus far relate to suspension and oscillation problems in the wheel trucks discovered during testing on the high-speed trainsets and locomotives. While progress has been made on fixing these problems, there are still issues that will need to be addressed before the trains can operate at their design speed of 150 m.p.h. Time is getting short for Amtrak to meet the July deadline and service may either be delayed or start with a maximum speed less than 150 m.p.h.

Question. What is the financial effect of this delay on Amtrak's revenue projections for fiscal year 2000?

Answer. Amtrak estimates that if service begins in July 2000 as currently planned, the lost passenger revenues in fiscal year 2000 associated with the delayed start-up would total $142 million. Amtrak projects that this revenue loss will be mostly mitigated by operating expense savings, interest savings, and contractor penalties for late equipment delivery. Amtrak plans to offset the remaining $44 million with new leasing agreements. The revenue loss will be higher if delays extend beyond July. The months of July and August are typically heavy travel months for Northeast Direct service, and a later start-up will mean that Amtrak will not be able to capitalize on this heavy seasonal ridership to boost revenues. While Amtrak would be able to partially mitigate the revenue impact of further delays through operating and interest savings, the net impact to Amtrak's bottom line in fiscal year 2000 will be negative.

Question. Will the delay have a domino effect on the implementation of high-speed Acela service in fiscal year 2001, as well, because the trainset delivery schedule has been set back?

Answer. Once the issues that are causing the current delays are resolved, "fixes" to the trainsets could be completed relatively quickly, allowing for an accelerated delivery schedule. Amtrak is working with the consortium building the trainsets to compress the delivery schedule and ramp up to full service in a shorter period of time—which it currently plans to do by December 2000. The original schedule called for full service by July 2000. However, at this time, we do not expect full service with all 20 trainsets before December 2000.

OVERSIGHT OF HIGH-DOLLAR INFRASTRUCTURE PROJECTS

Question. One of the issues that made the Inspector General's oversight report last year and again this year is that DOT needs to improve its management of transportation infrastructure projects. It is especially important for the management of high-dollar projects to be aggressive, because the risks to the government's financial interests are increased proportionally.

The Inspector General Report says that DOT should do the following: (1) Strengthen internal controls over project cost estimates; (2) Require and closely examine project finance plans; (3) Monitor project performance to minimize funding risk.

Has the Department of Transportation been implementing your recommendations? Which agencies are doing the best job reducing financial risk with Federal funds? Which agencies are not doing as well?

Answer. The Department of Transportation has been implementing our recommendations with varying degrees of success. The majority of high-dollar infrastructure projects using Federal funds are highway and transit projects.

With respect to reducing financial risk with Federal funds, the Federal Transit Administration's (FTA) use of full funding grant agreements has effectively limited the Federal government's financial risks and promoted accountability in the funding of new starts capital projects. These full funding grant agreements set the maximum amount of discretionary capital investment funds that can be used for transit projects.

The full funding grant agreements have effectively limited the exposure of the Federal government for project cost increases. They also provide local accountability and incentives for grant recipients to exercise tight control over project costs. Grantees know they must find the funds needed to pay any additional costs and that the Department will not entertain requests for any more discretionary funds.

Of the current 15 projects with grant agreements, 3 had cost increases of approximately $929 million. None received additional discretionary capital investment funds. For example, the new starts funds committed for the South Boston Piers Transitway remains $331 million, as established by the 1994 grant agreement, despite an increase of $188 million in the project's estimated cost.

By contrast, Federal Highway Administration (FHWA) projects have no comparable limitations. For example, the FHWA share of the Central Artery/Ted Williams Tunnel Project has increased by more than $8 billion as the project's costs have increased from $2.6 billion to over $13 billion.

We have also recommended finance plans as essential tools for identifying project costs and funding needs. Finance plans describe how projects will be implemented over time. They identify project costs and timing, and the financial resources needed to pay for those costs. However, better criteria are needed to ensure finance plans are complete, reliable, and consistent.

We found the quality and completeness of finance plans for highway and transit capital projects to be highly variable. Some finance plans accurately reported costs and identified funding shortfalls. Others needed to be more thorough in disclosing problems and presenting information in a consistent manner over time. For example, the 1999 Finance Plan for the Bay Area Rapid Transit District includes construction costs and operating costs for both the existing and new segments; includes a 10-year forecast that identifies underlying revenue and expense assumptions; and demonstrates that Bay Area Rapid Transit District has the financial capacity to operate its entire transit system, including the airport extension, after it opens in mid-2002.

Conversely, our most recent report on the Central Artery/Ted Williams Tunnel Project indicated significant, fundamental problems with its finance plan. The reporting methodology was changed so that the reviewer could only see the cost to complete, not the total project cost. The plan did not report specific cost, funding, and schedule indicators, such as "budgeted cost of work performed" versus "actual cost of work performed," "contract awards versus budget," "total projected cost by type of cost," and "annual funding requirements by source." However, in some specific cases (e.g. I–15 and California 210) FHWA has agreed with our recommendations to require updated finance plans and in the case of I–15, that update is much improved—i.e., it closed the funding gap, it identified sources for all funds necessary to cover all cost estimates. We recommend that FHWA revise its guidance on finance plans to ensure more complete and accurate reporting of financial performance. On February 17, 2000, after a $1.4 billion cost increase was announced by the Central Artery, the Secretary directed FHWA to accept and implement our recommendation.

AMASS

Question. There has been a continuing concern about the increasing number of runway incursions, collisions or potential accidents on the ground. The upward trend in runway incursions continued in 1998, with 325 incursions, an 11 percent increase from 1997. AMASS is the radar and related software/hardware to monitor airport surfaces and warn of potential runway incursions. A month or so ago, FAA announced that it was going to be two years behind schedule in deploying AMASS.

Would you please explain the reasons for the delay in the AMASS program, and tell us how this will affect FAA's initiatives to reduce the number of runway incursions? Should we be looking at other solutions?

Answer. Software development problems caused delays. Unresolved human factors issues are now causing additional delays. For example, the AMASS alert message on the ASDE–3 display is not readable beyond 10 feet, which is a concern since controllers are often further than 10 feet from the display during their normal operations. The delays in deploying AMASS will not affect other FAA initiatives such as educating and training pilots and controllers on reducing runway incursions. However, delaying AMASS increases the potential for an accident on the runway.

FAA should be looking at other solutions especially low cost solutions that can be implemented in a short time frame. AMASS will only help the 34 large airports designated to receive this system. Improving pilot situational awareness with technologies, such as in-cockpit moving map displays, that would identify what is on the runway and provide two set of eyes, the pilots, and the controllers, would reduce response time required to alleviate a potentially hazardous situation.

FAA is also looking to award a contract by the end of this fiscal year for a low cost Airport Surface Detection Equipment system that will provide surface surveillance for the small and mid-size high priority airports not designated to receive AMASS. FAA, however, has as yet to determine beyond Orlando, Florida, the proposed key site for the system, which small to mid-size high priority airports will receive the system.

GREAT LAKES ICEBREAKER REPLACEMENT

Question. The Coast Guard has expanded the mission requirements for the Great Lakes Icebreaker Replacement by proposing to add a buoy tender capability to the new icebreaking vessel. I understand that this is the first time the Coast Guard has proposed building other capabilities into an icebreaking platform.

Are you aware of any requirements or design specifications in the Great Lakes Icebreaker Replacement project that would inhibit this procurement from being a full and open competition?

Answer. The Coast Guard's current acquisition strategy does not call for completing final design until at least the first quarter of fiscal year 2001. Consequently, it is not yet possible to determine if these requirements and design specifications will restrict competition. Award to the firm submitting the successful proposal for this icebreaking vessel with buoy tending capability is scheduled for June 2001.

DEEPWATER REPLACEMENT PROJECT

Question. It is my understanding that the planning phase for the Deepwater project will not be completed before the Department submits its fiscal year 2002 budget request and Congress takes action on that request. Based on your experience, would you consider this approach to be consistent with recognized best practices in government acquisition programs?

Answer. Requesting budget authority without critical cost and schedule information carries substantial risk and is inconsistent with acquisition program best practices. Although the Coast Guard plans to request $350 million for the Deepwater Replacement for fiscal year 2002, industry teams will not complete their planning effort until several months after the budget requests must be submitted to the Congress. Experience in other major procurements such as those in the Federal Aviation Administration, has shown that factors such as uncertain designs and funding increase the likelihood that projects will experience problems associated with cost and schedule slippage.

The Coast Guard's Deepwater assets will reach the end of their useful lives over the next 30 years. The question therefore, is not whether they have to be replaced or modernized but how and when. To achieve success, the Coast Guard must identify and manage the risk associated with a project of this magnitude.

Question. What steps would you recommend that the Coast Guard take to ensure that it has adequate management controls in place prior to the fiscal year 2002 Budget Request?

Answer. While this Project employs a sound process to identify needs and alternatives, it is too early to determine with any degree of precision what the Project will cost or how long it will take to complete. The Coast Guard plans to submit a request in February 2001 for $350 million to begin construction in fiscal year 2002. The industry teams' proposals for an integrated system are not due until April 2001 and the final decision on what assets the Coast guard will replace or modernize will not occur until July 2001. The lack of industry teams' cost and schedule information when the budget is being prepared could adversely affect the Coast Guard's budget decision. To reduce the risk associated with this lack of information, the Coast Guard needs to justify to the Department and the Congress, how it can proceed without full cost data and a rational acquisition strategy. Three options it can consider are to:

—Defer the anticipated $350 million fiscal year 2002 Deepwater budget request until the results of the planning process are known.

—Expedite the planning process to identify the most critical Deepwater needs and justify the fiscal year 2002 budget request on that basis.

—Use information available from the industry teams to develop a current cost and schedule estimate for the Project that identifies anticipated acquisitions and justify the fiscal year 2002 budget request on that basis.

Another area requiring Coast Guard attention is how to ensure continuity of staffing in a project that could last 20 or more years. The Coast Guard's policy of rotating military officers could adversely impact institutional memory that could be critical to successful implementation of the project. We have suggested that the Coast Guard consider the need for senior level civilian leadership as a solution.

SUBCOMMITTEE RECESS

This hearing of the Subcommittee on Transportation is now recessed. The subcommittee will convene on Tuesday, March 28, at 2 o'clock in Dirksen 192 for an oversight hearing on the implementation of the Driver's Privacy Protection Act and the positive notification provision that was included in this year's transportation appropriations bill.

I want to thank all of you, Governor Thompson, Mr. Mead, and Mr. Basso.

Governor THOMPSON. On behalf of Amtrak, I would like to thank you, Senator Shelby.

Senator SHELBY. Thank you.

[Whereupon, at 11:17 a.m., Thursday, March 9, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

TUESDAY, MARCH 28, 2000

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 1:57 p.m., in room SD–192, Dirksen Senate Office Building, Hon. Richard C. Shelby (chairman) presiding.

Present: Senator Shelby (presiding).

OVERSIGHT HEARING ON DEPARTMENT OF TRANSPORTATION PROGRAMS—FISCAL YEAR 2001—CONTINUING

DEPARTMENT OF TRANSPORTATION

STATEMENTS OF:

PETER J. BASSO, ASSISTANT SECRETARY FOR BUDGET AND PROGRAMS, AND CHIEF FINANCIAL OFFICER
HON. KENNETH M. MEAD, INSPECTOR GENERAL

OPENING STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. The hearing is called to order. First of all, I would like to thank Ken Mead, the Department of Transportation Inspector General, and Jack Basso, the Assistant Secretary of Transportation for Budget and Programs, for being here today to reconvene and conclude the subcommittee's hearing on the Department of Transportation's most pressing management and oversight challenges.

We began this hearing early this month on March the 9th, but due to tight schedules on my part and that of Senator Lautenberg we were not able to finish the hearing. Since the witnesses have already made their opening statements when we first convened the hearing earlier this month, I would like to move things right along. So when Senator Lautenberg, if he comes here, I will recognize him.

AIR–21

Mr. Basso, Mr. Mead, we are pleased that you are here. If I could, I would just move into some questions. Mr. Basso, I understand that the President is expected to sign the FAA reauthorization bill that the Senate and the House recently passed, which the Secretary described as "a giant step forward." After the bloom is

off this rose, it will fall to people like you and Mr. Mead in his oversight and audit roles to manage all the Department's programs, those in both the protected and in the nonprotected categories.

I am increasingly concerned that Congress has not yet found the right balance of adequate investment in transportation infrastructure and also providing a programmatic and budgetary environment that encourages the maximum efficiency of our transportation systems, as opposed to simply maximizing our commitment of Federal dollars to payment or construction.

I will ask both of you this: Does this concern resonate with either of you? Do you believe that the budgetary structures that we are adopting may stifle or inhibit our common goals of increased and responsible Federal transportation investment? Mr. Secretary, you want to tackle that first?

Mr. BASSO. Yes, Mr. Chairman, thank you.

Let me say on the question of AIR–21, the President has clearly expressed his intent to sign the bill. In fact, I was advised we received the bill a little earlier in the day, so the clock has begun. AIR–21 I think clearly has some mixed blessings and challenges for all of us. On the infrastructure and modernization side, the additional funding, particularly for facilities and equipment, which is above the President's budget, will help us to move forward on the modernization issues. I think we all recognize, in the growth in the industry, that this is crucial.

On the other hand, as the President expressed, there are concerns as to how we will assure that the appropriate level of operational funding is maintained. I think that is a challenge that clearly is going to face the administration and the Congress as to how we work that out in the appropriations process, and I am very mindful of that challenge. We have talked about it, and I think we have an awful lot to do.

To complete the answer to your question, we have to do that within a balance in the Department, particularly where it relates to the United States Coast Guard and other critical national security and lifesaving functions of the Department.

Senator SHELBY. Mr. Mead, do you have any comments on that?

Mr. MEAD. Yes. I am glad you picked on him first. I get to reflect on the answer.

Senator SHELBY. Well, we like you both. We just happened to do this.

Mr. MEAD. There are a couple of implications that flow from AIR–21. One of them that I have difficulty sorting through is the effect on the budgets of agencies other than highways, mass transit, and aviation. In other words, there may well be implications for Amtrak, the Coast Guard and pipelines.

The other implication is for aviation itself. For example, the essential design of AIR–21 is that airports are funded first. Second, capital facilities and equipment modernization are funded. The third thing you fund—with what's left over—is salaries and operations expenses, which include safety inspectors and things of that nature. Yet, as we speak the Congress is being asked to sign off on a supplemental that is predominantly operations in nature.

There is not going to be enough money——

Senator SHELBY. That is right.

Mr. MEAD [continuing]. In the trust fund to pay operations, airports, and facilities and equipment. And since AIR–21 sets the order for funding as I described it, there will be a need to dip into the general fund to take care of operations.

Senator SHELBY. Mr. Basso, for this fiscal year the FAA's operations budget grew by 6 percent. I would think that the FAA Administrator would be able to find somewhere within the several hundred million of dollars of growth in the 2000 appropriation one-tenth of one percent to maintain the safety inspection work force. Are my expectations there unrealistic, considering the size of that budget? You know, you can always find something. The bigger the budget, you can squeeze a little. The smaller the budget, it is harder.

Mr. BASSO. I appreciate that, Mr. Chairman.

Senator SHELBY. I know it is tough and I know you have got a tough job.

Mr. BASSO. Let me just say this, I want to assure you, Mr. Chairman, we have done that squeeze. In fact, last night the White House transmitted to Congress——

Senator SHELBY. Did you find the money?

Mr. BASSO. No, sir. Let me say this: we found part of the money.

I do not mind sharing with you what really came over to us. Originally we started with a figure of about $200 million and I would say out of the $200 million we found enough to make up about $120 million or so of it by making appropriate adjustments, making the kind of adjustments we should. We then reached the point where we came to the realization that if we made up changes in other areas it meant really weakening our inspection work force and cutting some of the areas that I think we all agree are really crucial to managing safety in the FAA.

So after some, I will tell you, considerable examination, about 8 weeks worth of examination, we concluded that the only alternative was to come to the Congress. There is no more fat that we can find at this point in the short term to deal with it.

EMERGENCY RELIEF

Senator SHELBY. I want to get into emergency highway deficiency as we see it. We noted that the TEA–21 authorization provides an emergency highway program of $100 million a year.

Mr. BASSO. Yes, sir.

Senator SHELBY. And the administration has not requested additional emergency highway funds, notwithstanding the backlog of emergency projects from natural disaster I understand currently exceeds $500 million.

Mr. BASSO. Yes.

Senator SHELBY. Do not firewalls or special budgetary treatments make it more difficult, Mr. Secretary, to address emerging transportation requirements like the emergency highway program?

Mr. BASSO. Let me talk just a moment, Mr. Chairman, about emergency highway funds. One of the things that has troubled me is the fact that the $100 million that we have which is exempt from all other restrictions, was enacted in the 1973 Highway Act. So we have not really seen a change in that level in almost 28 years.

Senator SHELBY. It is not a lot of money, is it?

Mr. BASSO. No, sir, and it just does not make it from here to there, there is no question.

Senator SHELBY. In a Nation this size.

Mr. BASSO. Absolutely, and particularly what we have been experiencing the last several years, which averages well above that amount. In any event, what we did do was send up with the budget a proposal which would deal with the emergency relief question—which you are absolutely right, as of September 2000 we had a backlog of $500 million and is probably bigger than that now. Our proposal is to create new contract authority, but confine it within the obligation ceiling set in TEA–21, so that we did not basically end up burdening the committee with the additional outlays to be paid for in this program.

So we took our shot over 3 years of paying off that debt. I do think, though, that it is important to recognize that sooner or later we are going to have to find a more permanent and a better solution to the emergency relief program.

Senator SHELBY. Of course you are aware of the fact that the administration's proposed shift of funds from other guaranteed highway programs to emergency highways has been rejected by both the authorizing and appropriations committees in the House and the Senate?

Mr. BASSO. Yes, sir, I am aware of that.

CONSULTING CONTRACTS

Senator SHELBY. Mr. Mead, there have been a series of recent newspaper articles raising questions about Washington's Metro procurement policy regarding consulting contracts. You are probably familiar with some of these. Does the publicity concerning Washington Metro's lack of procurement control suggest to you an issue that the Inspector General's Office should look into, or perhaps you are looking into, and are standards for noncompetitive consulting contracts for organizations receiving substantial Federal funds an area that your office should get into, at least look at?

Mr. MEAD. Yes, I think that it's an appropriate area. Right now we have our investigation side of the IG's office——

Senator SHELBY. Are you looking into that?

Mr. MEAD. Yes. I think what is troubling there is the purposes for which the consulting contracts are let and the disparity between what you would pay an ordinary public servant for a task and what the consultants would get. Much of this is falling into the category of overhead, and when we are done with our work we will make a full report to the committee.

Senator SHELBY. Okay.

WAAS

The Wide Area Augmentation System, WAAS. Mr. Mead, Mr. Basso, let us just go back just a little bit to an article that appeared in Aviation Daily, I believe in 1996, 4 years ago. It said: "The Federal Aviation Administration abruptly terminated its $475 million pact with Wilcox Electric to apply global positioning system [GPS] technology to the Nation's air traffic control system, charging that the company had mishandled the contract. David Henson"—

I am just continuing to quote—"the FAA's Administrator, used strong language to describe his decision to cancel the contract only 8 months after the award, saying 'The agency no longer has a tolerance for ineptitude.'" Those were his words.

Now, 4 years later, to the current status of this procurement. The WAAS program is hopelessly off track. Its cost has escalated to $3.2 billion and it will not provide the capability it was advertised to do 4 months ago, much less 4 years ago. Does this mean that the FAA has rediscovered its tolerance for ineptitude, to use those words?

Mr. Basso, you want to answer that?

Mr. BASSO. Mr. Chairman, I think I can give you assurances that we have little or no tolerance for a continuation of ineptness.

Senator SHELBY. You do not have room for it, do you?

Mr. BASSO. No, sir, we sure do not.

I know the Administrator is spending a lot of personal time on this. One of the things that we intend to do with this program is to move very slowly and carefully to ensure that as we invest any more in this we know that each step of the way actually produces a result. We also are doing or planning to do a series of independent reviews by independent experts on that system to ensure that what we do in fact has an effective outcome.

I think there is no question in the past we have had huge problems with this. But I do think the current management has the program under control and is taking very judicious small steps to move forward cautiously and correctly on it.

Senator SHELBY. Mr. Mead.

Mr. MEAD. I think two essential things need to be done here. First, the burn rate of the contract ought to be reduced very substantially. Right now FAA is spending between $4 and $5 million a month on the contract, and the agency does not know how it will fix some of the technical problems with WAAS.

Second, as Mr. Basso indicated, FAA needs an independent assessment of WAAS problems by scientists and technical experts.

Senator SHELBY. How can you do that?

Mr. MEAD. We made a suggestion before Mr. Wolf's committee last week that FAA seek independent advice. The National Academy of Sciences has a track record of dealing with complex issues, and does not have a vested financial interest in the outcome. We did not mean to suggest, though, that it had to be the National Academy of Sciences. I just do not know of an equivalent group that can bring to bear a wide range of skills. I think it is important that the contractor provide information to this independent group, but that the contractor should not be a member in any way, shape, or form of this group.

Senator SHELBY. Mr. Mead, I believe you were quoted last week as being concerned "that neither FAA nor Raytheon has the necessary expertise to resolve problems faced by this procurement." You still believe that?

Mr. MEAD. Yes, and the FAA shares this view.

Mr. BASSO. Mr. Chairman, I would affirm that they do. In fact, I spoke with the Administrator this morning on this very subject.

Senator SHELBY. How can we help you resolve that? Is there a way?

Mr. BASSO. Yes, sir, I think you actually have. I think your——

Senator SHELBY. We have tried.

Mr. BASSO [continuing]. Attention to this has caused us to focus very clearly on it. The Administrator I know is committed, because I spoke to her this morning, about bringing in independent technical expertise to address that question.

I should also mention, I did not make it clear in my previous answer, but we do plan to reduce the burn rate on the program. We fully agree with the Inspector General's observations on what needs to be done here.

Mr. MEAD. Mr. Chairman, the key technical problem with WAAS is quite an interesting one. It focuses on the WAAS signal coming down from space. A pilot in an airplane has to know that the WAAS signal is exact, particularly when the pilot is landing. The signal must be precise. There is precious little room for error when you are landing. You have to know exactly where you are, and when WAAS cannot be relied upon.

So one of the problems FAA is having is knowing when the signal is unreliable, when it ought not to be used. I would say that FAA is 90 or 95 percent of the way there, but in aviation you cannot afford to have that extra 5 or 10 percent unresolved.

Senator SHELBY. It is not enough, is it?

Mr. MEAD. No. It is a very technical and complicated issue that FAA needs to solve.

CONTRACTING FAA FUNCTIONS

Senator SHELBY. Mr. Basso, dealing with FAA operations, given the pressures that we are likely to face—that are likely to face the FAA operations account under the new authorization bill, does it make sense—yes, does it make sense to pursue a greater level of contracting out of some of the functions that FAA has traditionally not done well, such as oceanic services, procurement of communications services, expanding the contract tower program, or others?

Mr. BASSO. Mr. Chairman, we have been looking at the potential for contracting out some services. That is under way. I cannot give you an exhaustive list of exactly which ones we would proceed with, but they are clearly under consideration. We have been consulting, not only with ourselves, but also with our unions and other people who have a role in all of this, and I would expect you would see some results of that.

Senator SHELBY. Does the oceanic modernization program offer you any opportunities for exploring different ways of contracting?

Mr. BASSO. I think the oceanic modernization program clearly does. One of the things that we face in the oceanic environment is the need to make investment upgrades. There is also competition from other international bodies. As you know, we are delegated authority to provide air traffic service for large areas of Atlantic and Pacific Ocean airspace.

Senator SHELBY. Mr. Mead.

Mr. MEAD. I think the answer to your question is yes. Oceanic is different from domestic operators, in that changes will not affect general aviation. You do not have as many of the different stakeholders in oceanic. You have mostly big airlines in that environment. Also you have an environment where there has been an incli-

nation, more of a willingness, by the carriers to pay user fees, which as you know is very controversial for domestic air space.

Another issue that you have to deal with, quite frankly, is the controllers' union and the workforce issue. In both contract towers, which FAA says can yield savings of $700,000 a tower over time, and oceanic, there are workforce issues where the union would be concerned about jobs. But I think that is a factor that could be worked out if Congress were to seriously pursue an effort in the oceanic air traffic control environment.

COST ACCOUNTING

Senator SHELBY. Mr. Mead, would it not be helpful to have a good cost accounting system in place so that they would be able to assess which functions or activities held the greatest promise?

Mr. MEAD. Yes, sir. As we discussed in the budget appropriation committee hearings several weeks ago, if FAA does not have that cost accounting system it cannot get control of operations costs. Further, FAA cannot figure out where its operations costs are actually going and the agency cannot identify opportunities for savings. So FAA has an operations account that between this year and next is going to increase by about 12 percent. We cannot keep that up in perpetuity.

DEEP WATER

Senator SHELBY. Mr. Secretary, we are concerned that the Coast Guard will have three proposals of deep water assets to acquire, but no clear understanding of what capabilities are necessary. In other words, we will not know where to go, but nevertheless we will have three versions of how to get going, maybe not to get there but to get going.

Would it make sense for the Coast Guard to formally establish asset requirements to meet its roles and missions?

Mr. BASSO. It does, Mr. Chairman.

Senator SHELBY. Otherwise you are flying blind in a way, are you not?

Mr. BASSO. Yes, sir.

Senator SHELBY. Or sailing blind.

Mr. BASSO. Yes. Let me just add that we actually go through a three-level process. One, a roles and missions study was just completed for the Coast Guard, the first update since 1980, which I think——

Senator SHELBY. Was that done in house?

Mr. BASSO. It was done in house, but it included a wide range of expertise, not just limited to the Coast Guard or the Department.

Senator SHELBY. Is that the inter-agency task force?

Mr. BASSO. It is, yes.

Senator SHELBY. Do you feel like they are doing a good job there?

Mr. BASSO. I do. I really do. I think I can come to you with a straight face and say that.

In addition to that, we have done as we go through these projects a mission needs analysis based on those roles and missions to take it down to a level of more detail, and then finally the capital management plan. So I think we do that work.

Senator SHELBY. Mr. Mead, what is your thought to that? What are your thoughts? Is that a valid concern?

Mr. MEAD. Pardon me?

Senator SHELBY. Is that a valid concern on our part?

Mr. MEAD. Yes. I think roles and missions is an issue. I think the Coast Guard has done a good job of planning, but the whole Deepwater project to date is just that, a planning process. It is not a budgeting process. The Coast Guard can plan its needs for the next 20 years. But it just does not follow that it can say, here is what the budget is going to be for the next 20 years. That is where I see a disconnect.

Senator SHELBY. Basically, you have got to know where they want to go, have you not?

Mr. MEAD. Yes. Well, just one quick example. The Coast Guard's planning process for its Deepwater needs will not be done until 2001, after the date it is going to be making its first budget request for Deepwater assets. It has the cart before the horse.

CENTRAL ARTERY

Senator SHELBY. Mr. Mead, I want to go to Boston just briefly, the area. It seems that the Big Dig in Boston seems to be a full employment project for your office, unfortunately. A recent report on the owner-controlled insurance program for the Central Artery Project recommended that the overpayments of insurance premiums should be recovered and reallocated.

Would you provide a brief summary of the problem and give a status report on this and the issue of the overpayments? Do you want to do it later or do you want to touch on it now?

Mr. MEAD. I can do it quickly.

Senator SHELBY. Okay.

Mr. MEAD. The problem was that the Artery was overpaying insurance premiums. After the insurance period was over, the insurer would say: Well, you paid too much. And the Artery would say in effect: Keep it, put it in an investment account. And they would. Our point is, the Federal Government will pay you back for insurance, but we are not going to pay you back for an investment account. If you are going to have an investment account, you will have to spend that Federal money on your highway projects.

The Federal Government is not in the business of funding investment accounts and we had an investment account there. The current status, I believe, is that the Department is of one mind—Mr. Basso can speak to that—that this should be discontinued. However, I think we still have some convincing to do in the State of Massachusetts.

Mr. BASSO. I might just add, Mr. Chairman, we are in full agreement. Mr. Mead and I personally spent a lot of time on this the last several months. The $150 million in the fund is to be liquidated. We have that agreement.

Let me just mention quickly that I have asked for and intend to get an independent actuarial evaluation of what needs to be in that fund, because the concept is good. Actually it can be a savings of owner-controlled insurance as long as the amount in the fund is right.

Senator SHELBY. How long will that take to do?

Mr. BASSO. I would bet we can get this done within the next 30, 60 days. This is not rocket science, let me say.

Mr. MEAD. It is a lot of money, though.

Senator SHELBY. It is a lot of money.

Mr. MEAD. It is over $129 million, plus interest. If you had that today, FAA could say, well, here is our supplemental.

Senator SHELBY. It would take care of a lot of problems, would it not?

Mr. BASSO. Yes, sir, it sure would.

FLIGHT DELAYS

Senator SHELBY. Mr. Mead, you are doing some work on the cause of flight delays in the aviation industry for the Congress. How is that work coming and are there other previews that you might share with us before the summer thunderstorms?

Mr. MEAD. Sure. We will be issuing a report later this spring to your committee, but here is some preview information I find absolutely fascinating. In the past several years, the number of flights spending one hour or more on a taxiway waiting to take off has increased 130 percent.

Senator SHELBY. Why?

Mr. MEAD. That is a good question. It depends on who you ask. An airline executive may say, "Well, it is FAA." An air traffic controller may say it is the airlines' fault. Others will say it is God, because of poor weather. A whole variety of different factors contribute.

One of our findings is that a huge deficit of information exists on the causes of these delays. Another major finding is the amount of hidden delays built into the airlines' block times. For the airlines to maintain good on-time performance statistics, they increase the length of the scheduled flight times to build in time for potential delay. The overall time it takes to complete a flight on about 77 percent of the routes in the United States has increased over the past 10 years.

Senator SHELBY. Mr. Mead, is there any value to the consumer—to the consumer—of the current delay reporting system? Do you see any value in reporting on-time departures? Are not consumers basically interested in on-time arrivals?

Mr. MEAD. I think consumers are more interested in on-time arrivals. I have a hard time, Mr. Chairman, understanding why it is relevant to me that my flight backed away from the gate within 15 minutes of the scheduled departure and then proceeded to spend 3 hours on the runway. Under this scenario, I do not think I took off on time, and I think most Americans would agree with that view.

Our current reporting system, though, says we took off on time that our flight was an on-time departure—because it backed away from the gate within 15 minutes of the scheduled departure time.

Senator SHELBY. That is what they claim it to be, anyway.

Mr. MEAD. Yes, sir.

FAA–NATCA

Senator SHELBY. Mr. Basso, the FAA has claimed that the FAA–NATCA agreement has significant productivity and offsetting cost

gains. Have those promised savings or productivity gains emerged yet, and what are the actual cost savings and productivity gains that have been realized to offset the cost of the agreement?

Mr. BASSO. I would say at this point, in fairness, Mr. Chairman, that I could not say that those productivity gains have offset the cost of the agreement. But we are in the early stages of it, within the first year and a half of this agreement. The data—I think the jury is still out. The data has not been sufficient for me to come up here and give you an honest yes to that.

I would like to supply for you for the record some additional information that would help show where the trends are likely to take us.

[The information follows:]

During the first part of fiscal year 1999, the FAA and NATCA worked to finalize the rules associated with the various productivity articles of the contract and the rules for the new pay system. A metrics team was established to identify and track measurable results of implementing the contract. The FAA will continue to refine and analyze this data to provide additional information to Congress on the results of this contract.

There are many indirect results of the contract, including an improved and more productive working relationship between FAA management and NATCA in modernizing the aviation system. An example of this partnership is the manner in which DSR has been fielded throughout the country, resulting in FAA completing many facilities well ahead of schedule. Another example is the STARS program; FAA has fielded the first segment at El Paso and Syracuse and is working on the advanced configurations of that program.

Mr. MEAD. This committee could help there, Mr. Chairman. When FAA signed that agreement, it said there would be productivity gains that it would quantify. We have been monitoring the situation since FAA signed the agreement. We think it is about time that FAA identified what those productivity gains are going to be and quantify them. But we are getting in the neighborhood of some big money when we are talking $6 or $7 billion a year in an operations account.

PROCUREMENT REFORM

Senator SHELBY. Do either of you expect anything significant to change at the FAA in terms of procurement management, FAA culture, employee morale, or financial management, or are we likely to see a new list of reasons why it is someone else's fault that the FAA is unable to improve in those areas? Mr. Mead?

Mr. MEAD. I think the jury is still out.

Senator SHELBY. I am talking about, as you know, the procurement personnel reform.

Mr. MEAD. I think the jury is still out. What you have seen essentially on procurement reform so far, is that FAA awards contracts quicker, but I think the point behind procurement reform was not only to award contracts quicker, but also to get the results. There is no question, on some acquisitions that FAA has brought them home quicker—HOST, and DSR, for example. But on big acquisitions like WAAS and STARS, we do not see the results yet.

On personnel reform, I think the jury still is out too. So far morale among controllers is a lot higher. Personnel reform has measurably improved relations between FAA management and the controllers. At the same time, the tangible evidence is in higher salaries.

ACQUISITION PROGRAMS

Senator SHELBY. In the area of software development, one of the difficulties that the FAA has experienced in its effort to modernize the air traffic control system has been an inability to prevent acquisition programs that are heavily dependent upon software development from extensive schedule delays and explosive cost growth. Similar problems are appearing elsewhere in the Department. The National Advanced Driving Simulator and the Coast Guard's Marine Information for Safety and Law Enforcement Project come to mind.

Mr. Secretary, considering that more and more acquisition projects will be software intensive, what steps can you take at the Department to better manage these types of development programs and share lessons learned from one modal administration to another?

Mr. BASSO. I think there are three steps, Mr. Chairman, one of which——

Senator SHELBY. This is going to involve big money, is it not?

Mr. BASSO. Yes, sir, absolutely it does.

The first step we took was to get a professional chief information officer on board who has real background in these areas.

Senator SHELBY. Did you have to go to the marketplace to do that?

Mr. BASSO. We did. We did in fact. I think that step one is to get someone, to put it bluntly, who knows what they are doing in charge of that.

Second, our monitoring of these projects has stepped up, and we have had a lot of assistance from the Inspector General's Office in that regard to really monitor closely what goes on.

Then I think, thirdly, what we need to do is to examine very carefully and share—you hit the nail right on the head—share the results of when something has gone wrong, why, so that we basically do not, so to speak, draw the cartoon of beating ourselves over the head with the same hammer every time.

FAA PROCUREMENT

Senator SHELBY. Dealing, Mr. Mead, with FAA procurement problems, I have been told that it appears to some in the industry that when a ready solution is presented to the FAA that can be deployed quickly, the FAA does not use its procurement reform authority to fast track that solution. Instead, the FAA begins a long process that enables competitors to catch up and leads all bidders to spend substantial sums of money with little or no return.

It seems to me that it is almost as though the FAA sits back and says: But wait, there must be a harder and more expensive way to do this. What steps, Mr. Mead, can the FAA and others take to remedy this perceived problem and find a solution for the aviation community? Is it real?

Mr. MEAD. Yes, there is——

Senator SHELBY. The perception is real, maybe?

Mr. MEAD. The perception is real, and FAA knows that it is real. I think Administrator Garvey has taken steps to get a grip on this.

Senator SHELBY. What steps? What steps?

Mr. MEAD. In some acquisitions, you will notice that FAA is doing what it calls build a little, test a little. It is taking smaller steps instead of trying for the big bang. But there are other cases, such as with STARS and with WAAS, two big acquisitions, where you do not see that in place.

I think that FAA can take heed to your advice on this, Mr. Chairman, still. But you cannot turn the ship around overnight.

Oceanic is another one. You mentioned this one earlier. Right now FAA is paying a total of $1 million, or $1.5 million, to some vendors to come out and demonstrate their wares. But the United States should already have a very advanced oceanic air traffic control system in place. It is woeful that we are so many years behind on this. One reason we are behind the eightball is because we tried to bite off more than we could chew years ago.

Senator SHELBY. Mr. Mead, would you provide for the record the relative work load of your office for each of the individual Department agencies?

Mr. MEAD. Yes.

Senator SHELBY. Would you do that? That would be helpful to us.

[The information follows:]

OIG Resource Utilization by Operating Administration

[Percent of total staff in fiscal year 1999]

FAA	37.0
FHWA	20.8
OST [1]	18.2
USCG	9.0
FTA	6.1
FRA	3.2
MARAD	2.7
RSPA	2.0
NHTSA	1.0
Total	100.0

[1] A large portion of this work was dedicated to reviewing DOT's consolidated financial statements.

ADDITIONAL COMMITTEE QUESTIONS

Senator SHELBY. You know we have got a couple of votes o the floor. We are going to recess the committee. We appreciate you both appearing to let us go through this expeditiously.

[The following questions were not asked at the hearing, but were submitted to the Agencies for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO THE OFFICE OF BUDGET AND PROGRAMS PERFORMANCE

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

OVERSIGHT OF HIGH-DOLLAR INFRASTRUCTURE

Question. One of the issues that made the Inspector General's oversight report last year and again this year is that DOT needs to improve its management of transportation infrastructure projects. It is especially important for the management of high-dollar projects to be aggressive, because the risks to the Government's financial interests are increased proportionally.

The IG's December 1999 Top Twelve Management issues says that the DOT should do the following: 1. Strengthen internal controls over project cost estimates, 2. Require and closely examine project finance plans, and 3. Monitor project performance to minimize funding risks. Please describe the Department's plans for improving the Federal Highway Administration's management of large construction projects.

Answer. DOT agrees fully with the IG's recommendations. The Secretary has directed the Assistant Secretary for Budget and Programs to issue a DOT-wide requirement for project finance plans and monitoring by June. FHWA has recently initiated two distinct actions to strengthen its management of high-dollar projects, improve controls over cost, and reduce funding risks. First, FHWA has formed a "Major Projects Team" to strengthen the oversight of all Federal-aid high-dollar projects. This team will consist of Headquarters and resource center personnel, including financial specialists, attorneys, engineers and other program specialists led by a core of Headquarters managers. While the FHWA Division Offices will remain responsible for traditional Federal-aid oversight responsibilities, the Major Projects Team will assist the Division Offices with risk assessment and oversight decisions in the areas of finance, public relations, environment, program development, and unusual engineering decisions. The Major Projects Team will support the Division Offices during the review of the financial plans and independent verification of financial data. The team will also review and oversee the implementation of recommendations from government audits and reviews. The Major Projects Team will report to the Director of the Office of Program Administration, Infrastructure Core Business Unit.

Second, FHWA created a task force to update our August 1998 guidance on financial plans. While FHWA's 1998 guidance fulfilled the provisions of TEA–21 Section 1305, OIG recommendations made it clear that more definitive guidance was necessary. The revised guidance will:

—Define the content and format of the Initial Financial Plan and the Annual Updates in terms of accepted accounting standards,
—Provide example charts and tables to promote uniformity,
—Require a commitment and acceptance of the plan by the leader of the State Transportation Agency, and
—Standardize FHWA's procedure for reviewing financial plans and annual updates.

AMASS

Question. There has been a continuing concern about the increasing number of runway incursions—collisions or potential accidents on the ground. The upward trend in runway incursions continued in 1998, with 325 incursions, an 11 percent increase from 1997. AMASS is the radar and related software/hardware to monitor airport surfaces and warn of potential runway incursions. A month or so ago, FAA announced that it was going to be two years behind schedule in deploying AMASS. Would you please explain the reasons for the delay in the AMASS program, and tell us how this will affect FAA's initiatives to reduce the number of runway incursions? Should we be looking at other solutions?

Answer. The previous AMASS schedule relied on a very high-risk acquisition strategy and schedule that included concurrent development and production phases. In addition, during April 1999 new program requirements related to human factors evaluations were added. At that point, FAA recognized that the development effort required to meet user requirements was far more extensive than originally envisioned, and that it would be unable to meet the October 2000 date for commissioning AMASS. The AMASS program underwent an in-depth review and restructure during the late summer and early fall of 1999.

AMASS will not reduce runway incursions, but will help prevent accidents if runway incursions occur. The implementation of AMASS at the nations 34 busiest airports, which is an enhancement to the Airport Surface Detection Equipment Model 3 (ASDE–3) radar, is one of FAA's initiatives to prevent accidents that may result in loss of life and/or property resulting from runway incursions. This spring, the FAA is holding nine regional workshops, bringing together airlines, airport officials, general aviation organizations, pilots and air traffic controllers to develop additional ways to reduce runway incursions at airports in the regions. These will be followed in late June, 2000 by a national runway safety summit in Washington, which will include results from the regional sessions and review of efforts in human factors and new technologies.

GREAT LAKES ICEBREAKER REPLACEMENT

Question. The Coast Guard has expanded the mission requirements of the Great Lakes Icebreaker Replacement by proposing to add a buoy tender capability to the new icebreaking vessel. I understand that this is the first time the Coast Guard has proposed building other capabilities into an icebreaking platform. What companies in the domestic shipbuilding industry, if any, have experience with this type of de-

sign? Are there any technical challenges and management risks caused by trying to incorporate other missions into the replacement Great Lakes icebreaking ship?

Answer. No heavy icebreakers with buoy tending capability have been built in the United States, although ships with similar multi-purpose capabilities were built in Germany and Finland within the last 10 years. To determine the interest and capabilities of the domestic shipbuilding industry to successfully construct a multi-purpose icebreaker, the Coast Guard conducted two rounds of market research to identify domestic shipyards capable of design and construction of this unique vessel. Numerous companies responded to the surveys and several were found to be capable and experienced in the design and construction of vessels of comparable size, technology and function.

The primary technical challenge of incorporating heavy icebreaking and buoy tending capabilities within the same vessel relate to hull design and effectively balancing the competing design requirements of the two missions. For example, heavy icebreaking requires a deep draft, large displacement, and high horsepower vessel. On the other hand, buoy tending requires a shallow draft, highly maneuverable vessel with accurate navigation and good sea keeping characteristics. Alternatively, many design characteristics complement the combination of the two missions. For example, the same maneuverability characteristics required to break out a vessel beset in ice will also provide the maneuverability required to place a buoy. To mitigate the technical risks, the Coast Guard developed a conceptual multi-purpose design and successfully tested the model hull form in an ice tank to validate its technical feasibility. This study was used to develop the proper design balance between the two missions that will result in the successful execution of both within the same platform.

DEEPWATER REPLACEMENT PROJECT

Question. The Coast Guard has three industry teams under contract to conceive and design a plan to modernize its deepwater fleet, aircraft, sensors and communications equipment over the next twenty years. While there may be value in receiving three independent options for acquiring new deepwater assets, I remain concerned that the Deepwater acquisition strategy is not grounded in political or fiscal reality. The project's price tag has been well discussed by the GAO, the Department IG, and this committee. It will be difficult to bind future Administrations or commandants—or even disgruntled industry contractors—to the January 2002 award decision. When the Coast Guard awards the Deepwater contract, will the award be a "winner-take-all" contract for one industry team or will the Coast Guard pick and choose the best, most innovative procurement ideas from all three teams and compete each item separately?

Answer. In January 2002, the Coast Guard intends to award the Integrated Deepwater System acquisition contract to just one of the three competing industry teams. However, the Coast Guard retains the right to "mix and match" from the three competing designs, in the event that all three designs contain some deficiency. To obtain essential contractual flexibility and protection for the Government, the Coast Guard intends to structure the Deepwater acquisition contract as an incentivized, indefinite delivery, indefinite quantity contract. The Coast Guard will issue separate delivery orders under this contract to perform the upgrades and acquire the new assets comprising the industry's proposed Integrated Deepwater System. In addition, the Coast Guard intends to include specific Value Engineering and/or Technology Refreshment contract clauses. These clauses will enable the Coast Guard to acquire new technology that meets or exceeds proposed cost and performance levels from firms not originally part of the selected Deepwater industry team.

FAA FINANCIAL STATEMENT

Question. One of the things that your office, the Office of the Secretary of Transportation, and the FAA Administrator's office has taken some pride in is the clean audit opinion for the FAA for this year. However, at the same time, I note that the Government Performance Project as reported in the Washington Post gives the FAA a "D" for Financial Management. Is this clean audit a one-time event, or have the structural and procedural changes been made at the FAA that will permit the FAA to continue to receive clean financial statement audits in the future?

Answer. DOT's goal is to ensure that the clean audit is not a one-time event. The first clean audit involved substantiating inception to date property and other accounts that were accumulated over 30 or more years. Fiscal year 2000 and future years will be based on transactions that occur within one fiscal year. In addition, as new property systems and the new DOT accounting system are put in place in fiscal year 2001, issues that needed to be addressed in the 1999 audit will be sys-

tematically resolved. Procedural changes have been made, but system changes will evolve as the new commercial off-the-shelf programs are funded.

QUESTIONS SUBMITTED BY SENATOR FRANK R. LAUTENBERG

TERMINAL VOICE SWITCH REPLACEMENT

Question. The Terminal Voice Switch Replacement (TVSR) program was established to replace 421 electromechanical and supportable voice-switching systems in the Federal Aviation Administration (FAA) by 2002. Within this program 267 systems are for larger more critical sites. These sites are receiving equipment under the existing Enhanced Terminal Voice Switch (ETVS) and the Rapid Deployment Voice Switch (RDVS/RDVS IIA) contracts. Does the FAA have a procurement plan for TVSR in fiscal year 2001-fiscal year 2004? Please present that plan and explain the anticipated changes from year to year.

Answer. The FAA is procuring equipment under the budget item entitled Terminal Voice Switch Replacement (TVSR)/Enhanced Terminal Voice Switch (ETVS). The following is the procurement plan for the TVSR/ETVS Program for fiscal year 2001-fiscal year 2004.

[Dollars in millions]

	Fiscal years—			
	2001	2002	2003	2004
Large Switches (ETVS)	10	10	17	17
Budget	$5.0	$5.0	$8.4	$8.4

The number of systems to be procured is based on the production capacity of the contractor, the available FAA engineering personnel to oversee installation of the equipment, and the relative priority of this project compared to other FAA programs.

VOICE RECORDER REPLACEMENT PROGRAM

Question. The Voice Recorder Replacement Program (VRRP) was established to replace 579 aging analog voice-recording systems that have reached the end of their service life. These sites are receiving modern digital equipment from the Digital Voice Recording System (DVRS) contact. The FAA must procure an approximate average of 84 systems per year (fiscal year 1999-fiscal year 2002) if it is to replace analog systems that have reached the end of their service life at the remaining 337 ATC facilities by the time the last DVRS production period expires in fiscal year 2002. Does the FAA intend to procure sufficient DVRS systems to replace the analog systems? If not, why not?

Answer. Yes, the FAA intends to procure sufficient DVRS systems to replace the analog systems. FAA is planning to renegotiate the contract so that the production period will be extended from August 2002 to July 2004.

FLIGHT SERVICE STATION SWITCH MODERNIZATION PROGRAM

Question. The Flight Service Station Modernization Program is being established to replace 64 aging technology voice-switching systems with limited supportability for the FAA's Automated Flight Service Stations (AFSS). I am told that current AFSS systems have, with minor modifications, been used in Terminal facilities. Is that correct? Both ETVS and RDVS were designed and procured to replace aging technology voice switches. Both of these voice switches have completed extensive FAA and Department of Defense testing programs to qualify for Air Traffic Control (ATC) operations. Is it true that either ETVS or RDVS Switches, with minor modification, can be utilized to satisfy the AFSS requirements? If so, why is the FAA initiating a development program for an alternative?

Answer. The FAA program currently identified to replace voice switches in the flight service option is known as the Automated Flight Service Station Voice Switch (AFSSVS). A switching system currently used in AFSS (Denro ICSS–1A) was adapted for a terminal application for its use in Southern California TRACON (SCT). However, the modifications required were not minor and, in addition to relative size, reflect the fundamental differences between the terminal and flight service environments and associated functions. The modifications included linking three systems together and removing position functions and peripherals found in existing AFSS

switching systems. The ETVS and RDVS IIA were designed specifically for terminal Air Traffic Control (ATC) operations. The ATC environment is primarily concerned with aircraft separation while flight service is an advisory and planning service. It is not certain that the ETVS or RDVS IIA voice switches can, with only minor modifications, be adapted to satisfy the AFSS requirements. The FAA has evaluated no design or product. Requirements for the AFSSVS have been developed to satisfy a FAA developed mission need statement that identifies operational needs that differ from the existing terminal and flight service environment. The AFSSVS requirement includes the capability to fold back operations during non-peak hours, which will require the ability to reroute radio frequencies between facilities to maintain service.

The FAA is currently performing an investment analysis on a number of alternatives selected to meet the approved mission need for AFSSVS. The objective of the investment analysis process is to determine which alternative approaches are feasible and affordable. The process is expected to be complete this spring and the results of this process will be presented to the FAA executive level for a decision in the summer of 2000. Subsequent to this decision, the selected alternative will be pursued in accordance with the FAA Acquisition Management System.

NEW YORK TERMINAL AIRSPACE REDESIGN—NEWARK DELAY REDUCTION

Question. The last major airspace redesign in the New York Terminal Area was initiated in the early 1980's, and implemented in 1987 and 1988. Since then, air traffic has grown, en route flows have changed, and aircraft performance and navigation capabilities have improved.

Unfortunately, the airspace structure has not kept pace with these changes. For nine of the last 12 years, and every year since 1995, Newark has been the most delayed airport in terms of FAA delays per 1,000 operations. JFK and LaGuardia are similarly impacted. In response to this situation, and at the urging of ATC system users and the Port Authority of New York and New Jersey, FAA announced the initiation of the New York/New Jersey Airspace Redesign Project in April 1998.

In the Fiscal Year 1999 Senate Transportation Appropriations Full Committee Report, $11 million was designated to support the Administration's national airspace review and redesign initiative, with $3 million specifically designated for the New York/New Jersey metropolitan airspace. Ultimately, the Omnibus Consolidated and Emergency Supplemental Appropriation Bill included only $3 million for New York/New Jersey metropolitan airspace design.

In fiscal year 2000, the Committee again allocated $11 million to support the comprehensive review and redesign of the nation's airspace with direction to FAA to concentrate on the eastern region, and in particular, the New York/New Jersey metropolitan airspace. The conference agreement funded the $9.622 million FAA request and directed $6.6 million to be used in direct support of the NY/NJ airspace redesign effort.

Considering this significant funding support over the last two years, what progress has been made on the New York/New Jersey airspace redesign? In FAA's Quarterly Report to Congress on Newark Delay Reduction Initiatives (Oct-Dec 1999), you advised that two milestones had slipped, and NATCA had directed its members to withdraw from the redesign project until facility pay classification guarantees were negotiated. What is the status of the NATCA negotiations, and what is the impact of these issues on the redesign schedule? What alternatives are available to FAA to proceed with airspace redesign without NATCA participation? What would they cost over the life of the project, and how long would it take to implement them?

Answer. The New York/New Jersey airspace redesign project has completed 31 public meetings to seek input from the public prior to developing redesign concepts. The first meeting was held September 22, 1999, and the last meeting was held on February 3, 2000. A total of 1,174 individuals attended the meetings and over 700 people provided written comments. FAA's Eastern Region will have a full report documenting the results of the meetings and this report will be available by May 2000. The Eastern Region will complete the computer modeling of the airspace baseline by April 2000. The Eastern Region has established joint NATCA/management redesign teams. These redesign teams are currently developing airspace design alternatives. Two alternatives will be ready for computer modeling by July 2000.

In December 1999, Eastern Region NATCA directed its members to stop work on the National Airspace Redesign project pending discussions on a national memorandum of understanding. In late February 2000, Eastern Region NATCA resumed work on airspace redesign, although no memorandum of understanding has been signed. FAA continued the customer and community meetings, but the timeline

slipped by 4 months. FAA management prefers to redesign the national airspace in collaboration with NATCA, however a contingency plan was developed to continue the project if NATCA did not return. The plan is still available to use if necessary. To continue the project, FAA would have added additional management employees to fill the teams. Typically, the new team members would have been first line supervisors from the major air traffic facilities. If FAA were to use this plan, they anticipate losing from 3 to 6 months to get the new work groups educated. The overall cost of this project would remain the same.

Question. Assuming that an agreement can be reached quickly with NATCA, what level of funding is required in fiscal year 2001 and in future budget years to achieve the milestones contained in the Quarterly Report on Newark Delay Reduction Initiatives?

Answer. In late February 2000, Eastern Region NATCA resumed work on airspace redesign, although no memorandum of understanding has been signed. Assuming Air Traffic Airspace Management Program receives the fiscal year 2001 Budget request of $20,578,000 for the national airspace redesign activities, Eastern Region will request $5,838,000 for fiscal year 2001. Support from the New England Region, Great Lakes Region, and Southern Region will be critical in achieving the milestones stated in the Quarterly Report on Newark Delay Reduction Initiatives. Future funding has not been determined.

Question. Considering the potential magnitude of any future airspace changes and the length of associated environmental reviews, what plans does the FAA have to phase in changes that could reduce delays at EWR? For example, the fiscal year 2000 appropriation provides $1.16 million to install an LDA with glide slope at Newark. What progress has been made to date on this project: what is the status of the required environmental review; and when will the facility be commissioned?

Answer. Airspace modeling at the William J. Hughes Technical Center is scheduled to be completed by the summer of 2000. The modeling results will help determine whether the Localizer Type Directional Aid/Simultaneous Offset Instrument Approach/Precision Runway Monitor project may proceed separately from the larger airspace redesign effort.

Should it be determined that the LDA/SOIA/PRM can be separated from airspace redesign, then a subsequent environmental review will be conducted and an implementation schedule will be developed.

Question. In the fiscal year 2000 Senate Transportation Appropriations Report, this committee directed the FAA to continue to work with the appropriate local authorities toward the installation of a PRM (Precision Runway Monitor) at Newark International Airport. This followed the provision of $2 million in fiscal year 1999 for preliminary work necessary for the installation of two localizer directional aids and a precision runway monitor at Newark. Several other airports (Cleveland, San Francisco, and Los Angeles) are interested in PRM technology. How does the FAA plan to procure PRM's to satisfy these needs? When will they be available for installation? Is there a PRM available for installation at Newark?

Answer. The FAA has not validated a requirement for a federally funded PRM system for Cleveland, San Francisco or Los Angeles. However, we have been working very closely with the city of San Francisco and the Airport Authority to prepare for the installation of a PRM system that the city of San Francisco is procuring directly from the manufacturer. The FAA is providing engineering and programmatic support to assist in the installation of this system.

The FAA has been working very closely with the New York/New Jersey Port Authority on the preliminary work to establish a PRM system at Newark. The use of PRM requires new procedures which are complicated and must be analyzed for safety and feasibility. Significant procedural work and modeling will validate the feasibility of installing a system. When validated, the FAA will work with the Port Authority to determine the best procurement option.

Question. Another concept that may hold promise for delay reduction at Newark is called Along Track Separation (ATS). It can be applied to closely spaced parallel runways and uses existing straight-in instrument landing system flight paths, which should minimize environmental concerns. The procedure permits the air traffic controller to reduce separation behind specific qualifying aircraft classes in both visual and poor weather conditions. A PRM and other airspace changes may be required to conduct these approaches in poor weather, however a good weather application may be possible with existing radar equipment, airspace configuration, and controller staffing. Since existing flight tracks and instrumentation can be used, it may be possible to obtain early delay reduction benefits. What plans does FAA have to evaluate ATS in fiscal year 2000? Is funding available for this project in fiscal year 2000? What funding is required to pursue this initiative in fiscal year 2001 and when can a proof of concept evaluation be started.

Answer. The FAA currently is working on several delay reduction initiatives specifically for Newark International Airport and other national initiatives with possible application to Newark. We have preliminarily determined that an evaluation of the ATS concept would require the development of new FAA separation standards. A complete analysis would be required to include modeling, simulation, and, possibly, an operational demonstration. Typically, this would be a very time consuming process. As part of the process, the FAA would evaluate the possibility of segmenting certain portions of the ATS analyses so that incremental benefits could be derived through a phased implementation. The FAA has not evaluated the ATS concept sufficiently to warrant a budget request in fiscal year 2001.

Question. As part of the language and funding associated with airspace redesign in the fiscal year 2000 Senate Transportation Appropriations Committee Report, FAA was encouraged to take advantage of new technologies to better manage traffic and capacity in the NY/NJ metropolitan area. The development of Area Navigation (RNAV)/Flight Management System (FMS) procedures is a Newark Delay Reduction Initiative. Development of RNAV/FMS procedures for Newark has been expedited by the use of technical support from MITRE/CAASD. FAA should continue to use this resource to develop and test advanced flight procedures that reduce controller and pilot workload, increase airspace capacity and efficiency and minimize noise impacts. Is adequate funding identified and available in the fiscal year 2001 budget request to continue this valuable process? What specific level of funding is required to support continued procedural development for Newark?

Answer. In fiscal year 2000, 12 staff months were allocated out of the MITRE–CAASD work program to support RNAV/FMS route development at Newark. In fiscal year 2000, approximately $370K was allocated for the Newark analysis. These resources have been provided through the MITRE–CAASD F&E and funding of the National Airspace Redesign. Planning for the fiscal year 2001 MITRE–CAASD work program is in its initial phases. Sustained support for Newark procedures and RNAV development will be included as part of the proposal developed by the FAA and MITRE–CAASD. It is expected that the same approximate level of staffing will be required in fiscal year 2001. Again, the request for this effort is approximately $370 K.

DEPLOYMENT OF NEW TECHNOLOGIES IN THE NEW YORK AREA

Question. Emerging technologies, including those associated with Free Flight, may permit FAA to improve the safety and efficiency of air traffic operations in the New York area, particularly during severe weather. Implementation of the Automated Flight Plan Processing—Departure Spacing Program (DSP) at the New York Air Route Traffic Control Center has been delayed repeatedly. The latest Quarterly report to Congress on Newark Delay Reduction Initiatives indicated Phase II, i.e., full two-way Host interface at New York Center, should be operational for the 2000 severe weather season. The fiscal year 2000 conference agreement provided funding for expansion of the system to Teterboro, White Plains, Islip, and the Air Traffic Control Systems Command Center. Will the system be operational for the summer of 2000? When will the expansion to the new locations be completed? What level of funding is required to sustain the system in fiscal year 2001 and is this funding identified in the FAA budget request?

Answer. The Departure Spacing Program (DSP) became operational for the Kennedy, LaGuardia, Newark, and Philadelphia airports on April 1, 2000. The tentative date for expanding DSP to include the Teterboro, Islip, and White Plains airports is December 15, 2000. The Air Traffic Control System Command Center is scheduled to have DSP operational in the spring of 2001, prior to the severe weather season. The level of funding needed to sustain the system is $7,400,000 and has been requested in the FAA's fiscal year 2001 budget request.

Question. The airlines and other industries make extensive use of simulators to improve training and reduce costs. Technology exists to provide site specific air traffic control tower simulators. NASA Ames has an extremely sophisticated unit, and the City of Chicago tried to purchase one for O'Hare. These devices would speed controller training and reduce the operational impacts associated with controller on-the-job-training. Does FAA have a program to procure tower simulators? How much would a simulator for the new Newark Tower cost and when could it be operational? Does FAA have any plans to acclimate controllers to the new perspective in the new tower prior to commissioning of the facility? Has FAA done any studies to determine the cost savings associated with a tower simulation device?

Answer. The FAA does not have a program to procure tower simulators for individual facilities. FAA operates the Airway Facilities Tower Integration Laboratory (AFTIL) at the William J. Hughes Technical Center in Atlantic City, New Jersey.

The new Newark Airport Traffic Control Tower simulation scenario is in place in the AFTIL lab. Teams of Newark controllers have visited the lab. Views and perspectives from the new location were observed and assessed. A mock-up of the cab interior is planned for the purpose of addressing human factors and technical issues and making necessary adjustments to ensure an efficient transition to the new facility. In addition, each Newark controller will spend a minimum of eight hours in the new tower, prior to its commissioning, in order to observe the operation from a new vantage point. The intent is to orient and acclimatize the controllers to the new perspective in order to ensure a seamless cut-over. FAA has not done any studies to determine the cost savings associated with a tower simulation device.

CONTROLLER STAFFING AT NEW YORK AREA ATC FACILITIES

Question. New York area ATC facilities have been difficult to staff in the past. Over the next several years, controllers hired in 1981 will be eligible to retire. This may result in a serious staffing shortage or an influx of new trainees at all facilities, particularly New York Center. We understand it typically takes two or more years for controllers to become fully certified. What are FAA's projections for future retirements at the major New York area terminal and en route facilities, including Newark Tower?

Answer. The Eastern region has a plan to maintain a flow of trainees into their facilities in the most efficient manner possible, balancing training requirements, operational efficiency, and budget constraints. All New York facilities have on-board staffing that exceeds staffing standards. We anticipate no problems in maintaining adequate levels of staffing in the New York area. Although more controllers will become eligible for early retirement beginning in 2001, experience shows that controllers do not retire when they first become eligible.

Question. Does FAA have a plan to insure an adequate flow of trainees to these facilities so ATC system capacity and efficiency is not adversely impacted by staffing shortages, training activities, or excessive overtime?

Answer. Yes, the FAA maintains a developmental pipeline of controllers. The pipeline is based on historical experience and is timed to provide fully trained controllers to backfill for expected retirement increases and to provide for growth in aviation activity.

QUESTIONS SUBMITTED TO THE OFFICE OF INSPECTOR GENERAL

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

LOS ANGELES MTA

Question. The President's budget request includes a recommendation for an appropriation of $50 million to Los Angeles MTA to purchase buses consistent with the master's ruling which is currently under judicial review. In the course of your Mega-project review or other work addressing some of the difficulties experienced by the LA MTA in recent years, have you developed an impression of the economic impact of the master's ruling on the LA MTA capital investment plan by virtue of the required acquisition of buses. In addition, what would be the economic and road congestion impacts on LA streets if the thrust of the master's ruling to reduce the number of standees on board heavily trafficked transit systems became a trend? Would it increase roadway congestion? Would it increase operating and/or capital costs for impacted transit properties? The Committee's information is that the trend in urban transit systems is toward perimeter seating configurations and more standees as opposed to the direction that the master's ruling seems to advocate. Is the Committee's information accurate?

Answer. Yes we have. The Office of Inspector General estimates that the capital cost to purchase the buses in the master's ruling could be as much as $187.6 million above the current LA MTA budget for its bus program. LA MTA projects that the cost to operate the additional buses will run about $21 million per year. LA MTA will have to reallocate funds from its other programs to purchase and operate these buses. LA MTA does not at present have a plan showing how it will fund the additional capital and operating costs.

OIG REIMBURSEMENTS

Question. Please prepare a table summarizing all proposed fiscal year 2001 reimbursements to the Office of Inspector general from other DOT modes, and what level of reimbursements were provided from other modes in fiscal year 2000.

Answer.

OIG REIMBURSEMENTS FROM OTHER DOT MODES

[Dollars in millions]

DOT mode	Fiscal year	
	2000 Actual	2001 Proposed
FHWA	$2	$3.524
FTA	1.5	1
Total Reimbursements	3.5	4.524

WOODROW WILSON BRIDGE

Question. The most current estimate being used by the FHWA for the Woodrow Wilson Bridge Project was developed in 1995, and the OIG identified $227 million in net increases to that number. According to FHWA, a new, more accurate estimate for the Woodrow Wilson Bridge Project was to be prepared by the end of 1999. What is the status of the estimate and how accurate is the estimate going to be?

Answer. FHWA expects to have the updated cost estimate by early May 2000. The Maryland State Highway Administration, Virginia Department of Transportation, and the District of Columbia's Department of Transportation have been working with their general engineering consultant to develop an updated estimate for the Woodrow Wilson Bridge since the project completed 30 percent design plans late last year. The states are merging the most current designs with the construction bid data to provide a current cost estimate for the project. The states are currently performing value engineering and constructability reviews to try to keep the cost within the $1.9 billion budget.

ALAMEDA CORRIDOR

Question. The most expensive and complex segment of the Alameda Corridor-Megaproject is being constructed using a design/build contract. What benefits, if any, have been derived from the use of this method?

Answer. The anticipated benefits of design/build contracting are: (1) allowing the project to begin sooner due to combining design and construction, (2) streamlining and expediting the contract award process, (3) awarding the contract based on "best value," (4) transferring risks of cost growth to the contractor, and (5) accelerating project completion. We have not evaluated the benefits of design/build and therefore cannot address whether or not they are being achieved.

According to the Program Manager with the Alameda Corridor Transportation Authority using design/build for the Mid-Corridor segment benefited the project in several ways. These are: (1) maintaining the original schedule, (2) transferring risks to the contractor for differing site conditions and environmental conditions encountered during construction, (3) improving coordination efforts with municipalities and utilities during construction, and (4) managing traffic during construction. As of March 2000, the Mid-Corridor segment is 27 percent complete.

INTERSTATE 15

Question. The IG has previously reviewed the Interstate 15 (I–15) Reconstruction Project in Utah. What are the objectives of any follow-up audit work planned?

Answer. The objectives of our current follow-up review of the I–15 Reconstruction Project are to: (1) update and evaluate the status of the project's costs, funding, and schedule since our previous report issued November 24, 1998; (2) identify any risks or emerging issues that could affect the completion of the project; and (3) follow up on the implementation of the recommendation contained in our previous report. (Our 1998 report recommended that FHWA require the Utah Department of Transportation to keep its finance plan current and to identify how it intends to resolve the funding shortfalls noted in the report.) We are nearing completion of our current review of the project. Our preliminary results indicate that project cost estimates remain at $1.6 billion; that funding is sufficient to cover these costs; and that the project is expected to be completed in July 2001, 7 months prior to the opening of the 2002 Winter Olympics in Salt Lake City.

MEGAPROJECT

Question. Are there lessons learned from previously problematic "Megaprojects" that the Department should apply to the oversight of other projects to avoid the same pitfalls?

Answer. Specific lessons that we have learned are that:

1. The Federal Transit Administration's full funding grant agreements have effectively limited the Federal Government's financial risks and promoted accountability. These grant agreements set the maximum amount of discretionary capital investment funds that can be used for transit projects. By contrast, Federal Highway Administration projects have no comparable limitations.
2. Finance plans are essential tools for identifying project costs and funding needs. However, better criteria are needed to ensure finance plans are complete, reliable, and consistent.
3. DOT needs to provide effective independent oversight of major projects to minimize funding risk.
4. Owner-controlled insurance programs should be considered on very large projects and used when they reduce program costs. However, DOT needs to ensure that Federal reimbursement for these programs is limited to the amounts actually needed to purchase insurance coverage or pay incurred claims.
5. Value engineering is a good tool for controlling cost and should be used on all major capital projects.

COMMERCIAL DRIVER'S LICENSE PROGRAM

Question. Has the OIG conducted any reviews of the Commercial Driver's License Program? If so, what are the findings and recommendations from the reviews conducted? What future work, if any, is planned?

Answer. Yes, we have an ongoing audit on Disqualifying Commercial Drivers. Overall, we found that Federal oversight of the Commercial Driver's License (CDL) Program has not been adequate to reasonably ensure that states properly disqualify commercial drivers. This situation occurred because the Federal oversight reviews were not comprehensive and did not include operational tests of the state systems to ensure compliance. We found significant deficiencies in the state systems for untimely, incomplete, and inconsistent reporting of traffic convictions, inaccurate recording of convictions, and not properly disqualifying commercial drivers.

We plan to recommend that the new Federal Motor Carrier Safety Administration improve its oversight reviews conducted at the states and make use of centralized monitoring through the Commercial Drivers License Information System.

Future audit work involving CDLs will focus on the processes for testing commercial drivers and issuing licenses, medical qualification requirements for commercial drivers, and training requirements for commercial drivers.

In addition, we have conducted criminal investigations related to state issuance of CDLs, such as Operation Safe Road. This joint Federal and state task force found that corrupt officials had accepted bribes to issue CDLs. To date, 30 individuals have been charged criminally; 22 of these have either pleaded guilty or been sentenced. The investigation identified in excess of 1,000 truck drivers who may have illegally obtained their licenses in Illinois. Of these, at least 175 are now licensed in others states. The Secretary of State notified all 50 states of the potential problem truckers. The investigation is continuing in its effort to uncover additional violations.

MEXICO-DOMICILED MOTOR CARRIERS

Question. What actions has the FMCSA taken as a result of the 1999 OIG report on Mexico-Domiciled Motor Carriers?

Answer. FMCSA agreed corrective actions were needed. In addition, the Motor Carrier Safety Improvement Act of 1999 provided them with greater authority to take enforcement actions against carriers found to be operating beyond their authorized geographical areas. This new authority will be helpful to the FMCSA in implementing the recommendations. According to FMCSA's written response to our recommendations, it is:

—Drafting regulations revising the registration process for foreign motor carriers to include additional safety-related questions and certifications of compliance.
—Developing reports that will be generated monthly, using data from the Motor Carrier Management Information System, to identify Mexican motor carriers operating outside their commercial zones.

—Developing implementation procedures for new enforcement provisions contained in the new safety law, which imposes substantial penalties and includes suspension and revocation of operating authority.
—Issuing policy guidance that addresses relevant registration and insurance provisions to be enforced by the states at roadside inspections. Also, requiring the states to describe enforcement activities for registration and insurance provision in their Commercial Vehicle Safety Plan when requesting Motor Carrier Safety Assistance Program grant funds.
—Drafting consistent policies and procedures for the newly established North American Borders Safety Border Program Division in FMCSA.

When the above actions are completed and fully implemented, the intent of our audit recommendations should be satisfied.

FINANCIAL PLANS

Question. Over the last several years the OIG has reviewed a number of financial plans for transportation Megaprojects. Please comment on the usefulness of these plans for reporting on the financial status of projects?

Answer. We found the quality and completeness of finance plans for highway and transit capital projects to be highly variable. Some finance plans accurately reported costs and identified funding shortfalls. Others needed to be more thorough in disclosing problems and presenting information in a consistent manner over time. For example, the 1999 Finance Plan for the Bay Area Rapid Transit District includes construction costs for the new segment; including a 10-year forecast that identifies underlying revenue and expense assumptions.

By contrast, in 1998, we reported that the Los Angeles Metropolitan Transit Authority did not have an updated, comprehensive finance plan but separate capital and operating budgets. At the time of our audit, these budgets reflected a $495 million capital funding shortfall and a $643 million operating shortfall.

Similarly, in our most recent report on the Central Artery/Ted Williams Tunnel Project we also found significant, fundamental problems with its finance plan. The reporting methodology was changed so that the reviewer could only see the cost to complete, not the total project cost. The plan did not report specific cost, funding, and schedule indicators, such as "budgeted cost of work performed," "actual cost of work performed," "contract awards versus budget," "total projected cost by type of cost," and "annual funding requirements by source."

Finance plans are essential tools for identifying project costs and funding needs. However, better criteria are needed to ensure finance plans are complete, reliable, and consistent. Neither FTA nor FHWA have adequate guidance for grant recipients to prepare finance plans. Finance plans describe how projects will be implemented over time. They identify project costs and timing, and the financial resources needed to pay for those costs. At a minimum, finance plans should:

—Include the assumptions underlying both cost and revenue estimates;
—Report actual versus budgeted amounts for contract award costs, the cost of work performed, and revenue;
—Clearly describe cost trends (e.g., contract change orders and contract awards) and the potential impact of those trends on project costs;
—Identify measures being taken to monitor and control costs;
—Identify sources of funding that can be used if costs rise or other anticipated funding is not received;
—Identify significant changes to the scope of projects, and the effect of these changes on the cost and capacity of the project; and
—Identify the grantee's plan for financing existing operations during construction of new or extended segments, as well as its plans for financing all operations, both new and existing, once construction is complete.

OWNER CONTROLLED INSURANCE PROGRAM

Question. A recent report on the Owner Controlled Insurance Program (OCIP) for the Central Artery project recommended that the overpayments of insurance premiums should be recovered and reallocated. What is the status of the OCIP and the issue of the overpayments?

Answer. On September 13, 1999, FHWA agreed to require the Central Artery to use past overpayments to pay the premiums for policy years 1999/2000 and 2000/2001. We also agreed to allow credit for any "past use" of overpayments to pay premiums between the end of our audit and the date of the agreement. FHWA also agreed to issue guidance to ensure insurance reserves for owner-controlled insurance programs do not exceed allowable amounts, and that any premium adjust-

ments are immediately used for other approved costs or returned to the Federal government.

Information provided by the Central Artery's insurance broker on April 4, 2000, indicates the Central Artery has used excess reserves to make scheduled payments of $12.3 million on August 1, 1999; $13.2 million on December 1, 1999; and $13.2 million on February 1, 2000. The state also is claiming "past use" credit for an $8.5 million reduction in the project's 1997/1998 premium; a payment of $7.2 million made with funds from the trust on August 1, 1998; and a payment of $13.5 million on December 1, 1998. The state's total claimed use of past overpayments is $67.8 million. FHWA and OIG are currently reviewing the supporting documentation regarding the above use of past overpayments.

FHWA has not yet issued a policy to limit Federal contributions to insurance reserves to the amount needed to pay incurred claims. The policy is still needed to ensure this and other highway construction projects do not attempt to use OCIPs as a means of drawing down Federal funds for investment purposes. FHWA's current target date for issuing the policy is July 31, 2000.

AIRPORT SURVEILLANCE RADAR

Question. Please describe, from your review of the installation of uninterruptible power systems (UPS) work on the Airport Surveillance Radar (ASR), whether a 480v design was a necessary requirement of a solution for the ASR–9 support. The committee's understanding is that the 480v design required a larger engine/generator to support the selected UPS-but that the ASR–9 solution could have been accomplished with a 240v system (and either the existing generator or a replacement generator) for substantially less cost. Is the Committee's understanding correct? Please discuss why the Office of Inspector General believes the 480v design was selected.

Answer. FAA considered remaining with a 208v system [referred above as 240v] as well as higher voltage systems to address the power-related problems with the ASR–9. Specifically, FAA evaluated three alternative designs: (1) a 208v UPS installation, at an estimated cost of $130,000 per site; (2) a 208v system upgrade (UPS, generator, wiring, circuits, etc.), at an estimated cost of $310,000 per site; and (3) a 480v system installation, at an estimated cost of $320,000 per site. FAA officials stated that their decision to utilize the 480v design was based on several factors including the better electrical noise reduction provided by a higher voltage design and the minimum disruption to radar service required for installation—two 4-hour shutdowns for the 480v design compared to 7–10 days for the 208v upgrade. The 208v installation would have been less costly, but would not have addressed all of the problems with the ASR–9 power system, such as the instability and capacity of the generator, poor circuit breaker coordination and transmitter circuits, and random electrical noise on the power conductors.

SUBCOMMITTEE RECESS

Senator SHELBY. We will convene again next Tuesday, April 4, at 10 a.m. here in this room, Dirksen 192, to hold an oversight hearing on implementing the Drivers Privacy Protection Act positive notification requirement, which was part of the 2000 transportation appropriations bill.

Gentlemen, thank you both. The hearing is recessed.

[Whereupon, at 2:32 p.m., Tuesday, March 28, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

TUESDAY, APRIL 4, 2000

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:06 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Richard C. Shelby (chairman) presiding.

Present: Senators Shelby and Bennett.

IMPLEMENTING THE DRIVER'S PRIVACY PROTECTION ACT EXPRESS CONSENT REQUIREMENT

NONDEPARTMENTAL WITNESSES

OPENING STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. The subcommittee will come to order.

As we enter the 21st Century, we live at a time when the influence of technology in our lives has never been greater. The advent of personal computers, the Internet, silicon chips, ATM's, and cellular phones have changed almost every aspect of the way we live and have greatly enhanced the quality of our lives.

The introduction of these new technologies has transformed our society and economy with breakneck speed. In little more than the blink of an eye we moved from the Industrial Age to the Digital Age. While the changes bring forth great economic promise and personal convenience, they also present difficult challenges.

One of the most important of these challenges is establishing ground rules that preserve the privacy rights of individuals, while providing an atmosphere in which society can take advantage of the advances in information technology.

Because recent technological innovations have the capability to compile, organize, store, and transmit data captured from all walks of life, I believe we must pay close attention to the manner in which personal information is handled in the Digital Age.

Clearly, it would not be an understatement to say that the new technology economy has a voracious appetite for information. Information itself may now be the most valuable commodity in our economy.

Furthermore, personal information is rapidly becoming the most valuable kind of information. The considerable demand for this type of information compels businesses to become much more ag-

gressive in acquiring information to try to better understand anything and everything about consumers.

Medical, credit card, banking, phone records, as well as personal information collected under force of law by government—records covering just about every activity in our lives—are being gathered, stored, shared, and sold.

Even as we enjoy the benefits brought about by the surge of new technologies, most of us are developing an eerie uneasiness that government and industry are collecting so much personal information, that our privacy is at risk, and occasionally, we get a tangible glimpse of just how vulnerable our private lives are.

Trans Union, which is one of the three largest credit reporting agencies, was selling the bank activity, mortgages, car loans, and credit card histories of 160 million Americans to direct marketers until the Federal Trade Commission ordered it to stop last month.

DoubleClick, Inc., a leading Internet advertising company, was forced to delay linking web cookies or histories to individual accounts after a public outcry against the practice. The company's massive database that was put on the shelf, would have merged the names, addresses and other personal information of Internet users to a log of web sites each individual had visited and the purchases each had made online.

In any event, I believe that it should be left to the individual to choose when and how to participate in a marketplace that has become obsessed with learning his or her personal facts. All of us already make decisions everyday regarding the scope and level of that participation.

For instance, you may join a grocery store membership club that allows access to special discounts, and you should expect your purchasing habits to undergo a data sweep. You may choose, however, not to enter a particular web site for fear that your information would not be secure at that web site, and later choose to take advantage of the convenience of purchasing from a catalog sent to your home.

Just as we have found that some consumers are price-sensitive and others are time-sensitive in airline tickets purchasing, I believe that in our new economy, some consumers will be privacy-sensitive, and successful businesses will embrace this by providing consumers with greater control over their personal information they use or place in the commercial marketplace.

So, an individual, at his or her discretion, may supply information to private industry. I was shocked, however, when I learned that much of what enters private databases is gathered from government records.

Individuals are forced to provide their names, addresses, social security numbers, and vital statistics to the state when they apply for a driver's license, and additionally provide the make, model, and the unique number of their automobile when they apply to register their vehicle. This personal information, some of which is rather sensitive, is not volunteered, as it is in private transactions.

It is compelled by the state as a condition of granting the license and enforced with criminal sanctions. While it is obviously necessary for state governments to collect such information for its own use, I believe it is insidious that state governments use the power

of law to extract information from you while never intending to keep that information confidential or to seek your consent before sharing that information with others.

I became interested in the sale of state government records after reading in several Washington Post articles that South Carolina had sold the photographs of its drivers to a business in New Hampshire, purely for making a profit. In this case, the business was in the process of building a national database of drivers' license photographs and personal information to allow retail clerks to verify consumers identities.

It is a laudable goal to protect consumers from identity theft, a growing crime, whereby fraud artists steal personal information from their victims to set up phony bank and credit card accounts and run up huge bills.

I am gravely concerned, however, about using drivers' license photographs coerced from citizens and used without authorization for any non-official purpose. Public outrage forced South Carolina, Florida, and Colorado to cancel the proposed bulk sale of drivers' photographs.

I believe that outrage is a very reliable indicator of the public's desire to not have their personal information distributed without their own permission.

Sadly, this particular incident is just the tip of the iceberg. Whereas this was the first instance in which states had begun selling images wholesale, for decades they have been routinely selling sensitive personal information from public records. The technology of the Digital Age has rendered public record law as obsolete as the transistor.

No longer are public records maintained in file boxes or microfiche drawers in isolation from one another at government repositories with limited access. Instead, states store public records in electronic formats and use sophisticated databases that merge and index all of an individual's information from numerous public records.

Some states are even discussing making certain records available on the Internet. The personal information required from individuals by law has become too accessible and potentially too vulnerable to computer pirates.

Unrelated secondary uses of personal information without the knowledge of the general public—and often without prior approval—is troubling to a lot of us. Selling personal information for inspection by anyone does not promote accountability for government or increase the efficiency of its service to the citizens of that particular state.

I believe, rather, that it is a violation of the public trust for the government to compel citizens to reveal their private information and then sell it to outsiders for profit. It undermines public confidence in government and encourages people to withdraw from the marketplace and society.

I think that the government should either have express consent prior to making a sale or keep personal information confidential, absent a compelling need to disclose it.

Sales of personal information to commercial enterprises, solicitors and direct marketers may raise money for state governments,

but they do not meet a compelling need standard. In fact, I believe these profits amount to an unauthorized tax on the privacy of the American people. Rather than taking our money, the government has appropriated something arguably much more precious—a piece of our lives.

In an effort to stop unauthorized sales of personal information by state governments, I included a general provision in the 2000 Transportation Appropriations bill that does two things; first, it ties federal transportation funding to compliance with the Driver's Privacy Protection Act of 1994. And second, it requires states to obtain the express consent prior to release of information in two situations.

First, individuals must give their consent before a state is able to release a category of information. This category is particularly sensitive information, including photographs, social security numbers, and medial or disability information.

Second, individuals must grant their consent before the state can sell or release other personal information when it is used for the purpose of direct marketing, solicitations or individual look-up.

These provisions have ended an unusually loathsome practice—an ever dangerous practice, if the information lands in the hands of thugs, thieves and stalkers—and promises greater protection for the privacy of the American people.

Recently, in Reno versus Condon, a South Carolina case, the Supreme Court of the United States upheld the constitutionality of the Driver's Privacy Protection Act. I believe, as do all nine members of the Supreme Court in an unaccustomed unanimous ruling, that the sale of personal information collected by state governments is clearly within the purview of Congress to regulate in the national interest.

Unfortunately, in our fervor to transform the economy, we have not established rules to protect ourselves or our privacy. By pursuing the unbridled exchange of information, we have proceeded headlong into the modern equivalent of the unregulated Wild, Wild West, and there is no sheriff in Dodge.

We are at the point where strangers, from telemarketers to government bureaucrats, obtain personal information about us and our children that we would not discuss at the dinner table, much less with a neighbor, and trade on it for profit.

I am not sure this is the direction we want this new frontier to go. I do not believe that anyone, either in the marketplace or the government, has an unfettered right to the personal information of Americans. That is why I was inspired to draft the provision of last year's appropriations act.

I am a firm believer in free markets and the benefits of the new technology economy. We live in the most prosperous society on earth because of willingness to embrace free markets and to adopt new technologies to our goals.

However, as we move forward and technology plays an even greater role in our lives, it is essential that technology serves us, rather than us serving it. To fully reap the promise of technology in the Digital Age, it is more important than ever for us to establish a framework that respects and protects individual freedom and preserves the ability of individuals to make their own choices.

The American people, as individuals, not state governments or financial service corporations or Internet service providers, should have the power to decide for themselves when and how they want to participate in the economy.

It boils down to this: We have doors on our homes so that outsiders who seek entry must knock and ask our permission to enter. When we want people to come in, we invite them. When we do not want them in, they are not permitted to enter.

Doors provide us with the means to control our interactions with other people. American citizens should have the power to put doors on all aspects of their private lives and to expect that anyone who wants to enter must seek and gain consent.

Senator SHELBY. Senator Bennett.

STATEMENT OF SENATOR ROBERT BENNETT

Senator BENNETT. Thank you, Mr. Chairman. I appreciate your—your comments. And I commend you for holding this hearing and focusing on this issue, because this is an issue that comes up again and again and again.

I first entered it about 4 years ago, when quite innocently, I tried to draft a bill dealing with the privacy of medical records. And I thought this was going to be a very simple sort of thing. We wanted to make sure that everybody's medical records were held confidential. And we had plenty of horror stories of people who had been victimized by people—other people getting hold of their medical information.

Four years later, I have discovered that it is not a simple issue at all. And as you have appropriately and correctly pointed out in your opening statement, Mr. Chairman, we have the challenge of balancing the advantages of the technological age with the very appropriate American desire to keep everything confidential.

If I may use an analogy from my odyssey through the difficulty of medical privacy, from a treatment point-of-view, it is now possible for an individual to carry a—not only a card, a tiny chip embedded in a card, in which his entire medical history is available, so that if the individual is in an accident, the paramedic can take that card out of his wallet, put it in computer, and have all of his allergies, all of the "reactions to" information, everything in front of him, immediately available. And that is wonderful.

And the flip side of it is that someone can get a hold of the medical records, say, an—a prospective employer, look through all of those records and say, "I do not want to hire this person, because he or she might add to the cost of my insurance policy, because, look, here is a—here is a disease that occurred 20 years ago. And having somebody of that kind in my insurance pool might raise my rates. And I am not even going to interview him."

Now, the same thing applies all across the board. There are enormous advantages that can come from having information available. You can be saved money, you can be saved time and effort by having information about your buying habits available to the marketers, because they will not market things to you if it becomes clear from your buying pattern that you do not buy those things.

The flip side of it is, you get invasion of your privacy in areas that you might not want.

So, the challenge is finding a balance between the very appropriate desire of all Americans for privacy and the desire of Americans to say, "Gee, if there are advantages that will save me time and money by having some of this information out, I would like those, too."

Striking that balance is a very difficult challenge. And I am hoping in the hearing today that we can get information from these witnesses that will help us strike that balance.

So, I commend you, Mr. Chairman, for your past interest in this subject. You have been one of the leaders on this and helped us—helped us move forward.

I would ask that written testimony, after the hearing, might be also made available, because I think people who read these hearings are going to have reactions that could be useful to us.

So, I would ask, Mr. Chairman, that the record be kept open for a time after the hearing for additional written comments, if they might come in.

Senator SHELBY. Without objection, it will so be made.

Senator BENNETT. Thank you, Mr. Chairman.

Senator SHELBY. Our first panel today will be—and you all can come on up—is Phyllis Schlafly, Eagle Forum; Mr. Ed Mierzwinski, Public Citizen; Ms. Susan Herman, National Center for Victims of Crime; and Greg Nojeim, American Civil Liberties Union.

I want to welcome all of you to the Appropriations Oversight hearing today. Your written testimony will be made part of the record in its entirety.

I will start with you, Ms. Schlafly. You proceed as you wish. Welcome, again.

STATEMENT OF PHYLLIS SCHLAFLY, PRESIDENT, EAGLE FORUM

Ms. SCHLAFLY. Thank you, Mr. Chairman, for holding this hearing, and Senators. We appreciate your interest in this subject.

I am Phyllis Schlafly, President of Eagle Forum.

The Fourth Amendment is one of our precious constitutional rights: "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated."

For various specific purposes, the government requires us to disclose information about our persons, houses, papers and effects. But the government's use of that information should be restricted to the purpose for which it was constitutionally demanded and received. The government should not be able to act as though it owned that information, or to sell it or display it or traffic with it without our consent.

Some years ago, the telephone companies asserted a copyright or property right in the telephone book, with its listings of our names, addresses and telephone numbers. The Supreme Court unanimously ruled, in Feist versus Rural Telephone Service (1991) that copyright protection is granted only to authors who create new works, not to corporations that merely collect data. So, the phone companies do not own their listings of names and phone numbers just because they spent money collecting them.

Likewise, the government does not own its listings of our name, address, phone number, social security number, photograph, or

other personal information just because we are required to provide them for specific purposes.

For the government to behave as though it owns that information, or to sell it to others, is not only a misappropriation of rights that belong to the individual, it is an action that tends to destroy public confidence in government and its trustworthiness.

For example, we are required to give a great deal of personal information to the Internal Revenue Service, but we would be outraged if we discovered that the IRS were transferring that information to other agencies or selling it. Likewise, for the information we give to the Social Security Administration.

When we apply for a driver's license, we give our identity information, along with a photograph and medical information, to our state's motor vehicle bureau, in order to be granted the privilege of operating a motor vehicle on the public streets. We do not give that information for any other purpose.

We have been shocked to discover that some states have been selling that information for commercial use or otherwise making it available to the public. That was not why we gave the state that information.

We were particularly dismayed to discover that the U.S. Secret Service gave a grant to a New Hampshire business to buy state drivers' license information, including photos, which was then marketed to private companies.

The discovery that states have been engaging in these practices, makes us feel used and betrayed. We feel the state has appropriated our identity without our consent. Worse still, this contributes to a growing perception that we cannot trust our government.

The Driver's Privacy Protection Act, passed in 1994, forbade states from making such information available without providing individuals the option of having their information protected. In other words, the individual had to affirmatively opt-out of the system in order to keep their information from being sold. The Supreme Court unanimously upheld this law last year in Condon versus Reno.

Last year, due to the vigilance of Senator Richard Shelby, this law was strengthened by a provision in the Transportation Appropriations bill to change "opt-out" to "opt-in." This means that motor vehicle bureaus must seek each driver's written consent before selling photos and personal information about individuals who apply for driver's licenses.

This change is very welcome. It not only corrects an injustice, but it helps to reassure citizens that the government is not cheating on us behind our backs.

We should be particularly solicitous about government's use of driver's licenses, because it appears that driver's licenses have become an extraordinary temptation to various special interests who see them as a means to achieve other objectives. At the federal level, some people want to convert driver's licenses into federal ID cards; something that is intolerable in a free society.

The 1996 Immigration Act mandated that state drivers' licenses contain machine-readable social security numbers as the unique numeric identifier, thereby enabling the federal government to use

the driver's license as a federal ID card. After public protest, this requirement was repealed in 1999.

Driver's License Protection is not a standalone issue. It comes in the context of the growing issue of privacy and what many see as an orchestrated invasion of our privacy by the government in violation of the Fourth Amendment, as well as by legitimate commercial interests and by fraud and theft. What makes these invasions so easy is the ability of computers to store massive quantities of personal information on databases and access that information in sophisticated ways.

For example, yesterday's New York Times carries a large front-page news article relating that "Law enforcement authorities are becoming increasingly worried about a sudden sharp rise in identity theft, the pilfering of people's personal information."

And William Safire's column, of the same date, calls attention to two notorious examples of the release of personal privacy information by the White House and the Pentagon.

It is bad enough when private interests invade our privacy, but it is positively offensive when the government does this.

That is why Census 2000 has stirred up a firestorm. Americans have become increasingly fearful of giving the government so much personal information that can be so efficiently and rapidly retrieved from computers. Databases give the government extraordinary powers to monitor the daily activities of law-abiding citizens.

Now, I have, in my testimony, a lot of examples of how the government is gathering all of this personal information and how much public outcry it has caused. And all of this government monitoring is allegedly for the purpose of locating terrorists and money launderers and drug kingpins and Medicare and Welfare cheats, but the reach of the monitoring goes far beyond what is necessary to achieve its purported objectives. Only totalitarian regimes monitor the private actions of law-abiding citizens.

We should prohibit the government from building databases of personal information on American citizens that is none of the government's business. And when the information is the government's business, the information should be allowed to be used only for the purpose for which we give it.

Thank you, Mr. Chairman.

Senator SHELBY. Thank you, Ms. Schlafly.

[The statement follows:]

PREPARED STATEMENT OF PHYLLIS SCHLAFLY

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Some years ago, the telephone companies asserted a copyright, or property right, in the telephone book with its listings of our names, addresses and telephone numbers. The Supreme Court unanimously ruled in *Feist* v. *Rural Telephone Service* (1991) that copyright protection is granted only to authors who create new works, not to corporations that merely collect data, so the phone companies do not own

their listings of names and phone numbers just because they spent money collecting them.

Likewise, the government does not own its listings of our name, address, phone number, Social Security number, photograph or other personal information just because we are required to provide them for specific purposes. For the government to behave as though it owns that information, or to sell it to others, is not only a misappropriation of rights that belong to the individual, it is an action that tends to destroy public confidence in government and its trustworthiness.

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Driver's License Protection is not a stand-alone issue. It comes in the context of the growing issue of privacy and what many see as an orchestrated invasion of our privacy by the government in violation of the Fourth Amendment, as well as by legitimate commercial interests and by fraud and theft. What makes these invasions so easy is the ability of computers to store massive quantities of personal information on databases and access that information in sophisticated ways.

For example, yesterday's New York Times (4–3–00) carries a large front-page news article relating that "Law enforcement authorities are becoming increasingly worried about a sudden, sharp rise in identify theft, the pilfering of people's personal information . . ." William Safire's column of the same date calls attention to two notorious examples of the release of personal privacy information by the White House and the Pentagon. It's bad enough when private interests invade our privacy, but it's positively offensive when the government does this.

This is why Census 2000 has stirred up a firestorm. Americans have become increasingly fearful of giving the government so much personal information that can be so efficiently and rapidly retrieved from computers. Databases give the government extraordinary powers to monitor the daily activities of law-abiding Americans.

The 1996 Welfare Reform Act requires all employers to send the name, address and Social Security number of every new worker, and every employee who is promoted, to a new government database called the Directory of New Hires. We were told that this was just to locate Deadbeat Dads, but now we find that another law

passed last year allows this database to be shared with the Department of Education. Another problem with the New Hires Directory is that small banks and credit unions, which can't afford the technology or manpower to search their customer databases every three months for "matches" against state-provided lists of deadbeat dads, are just handing over to the government all confidential information on all their customers and letting the government conduct its own search for "matches."

We in Eagle Forum have long been concerned about the aggressiveness of public schools in requiring children to fill out nosy questionnaires revealing all sorts of non-academic information about attitudes, behavior, health and family privacy. It was offensive enough when all this personal information went into manila file folders, but now it is entered on easily accessible databases where it can be shared with other databases.

The Federal Deposit Insurance Corporation (FDIC) tried to impose a regulation called Know Your Customer—a plan to require banks to make a computer profile of all their customers' deposits and withdrawals and report "inconsistent" transactions to a federal database in Detroit called the Suspicious Activity Reporting System. After the comment period produced more than 250,000 negative and only 3,000 positive comments, the FDIC backed down and abandoned its plan temporarily.

However, during congressional consideration of the big Financial Modernization bill last year, we discovered that many banks are already making customer profiles and selling them to telemarketers. We are disappointed that the banking lobby successfully blocked Senator Richard Shelby's amendment that would have required banks to get the prior consent of customers before selling private financial information.

The Federal Communications Commission (FCC) has mandated that all wireless providers by 2001 be able to pinpoint the location of wireless phone calls. Cell phones are becoming homing devices for the government to track our whereabouts.

The Federal Aviation Administration (FAA) has proposed a regulation that would effectively give the government unlimited access to everyone's personal travel records. The FAA gave $3.1 million to Northwest Airlines to create software for a database of personal travel records, plus $7.8 million to other airlines to assist in deploying it.

The 1996 Kennedy-Kassebaum Act authorized the Department of Health and Human Services (HHS) to assign a "unique health care identifier" to every American so the government can enter and track individual medical records on a government database. Public reaction was so adverse that Congress put a moratorium on implementation.

The 1993 Comprehensive Childhood Immunization Act gave the Department of Health and Human Services $400 million to induce states to create databases of all children's vaccinations. The Centers for Disease Control (CDC) is trying to link these state databases into a federal database, and this will ultimately enable the government to deny admission to daycare, kindergarten, school or college, or even access to medical care for any child who has not had all government-mandated shots.

Another plan to collect private information on a government database involves sending "home visitors" into the homes of all first-time parents in the project called Healthy Families America. Information is entered on a nationwide computerized tracking system called the Program Information Management System that can eventually be combined with preschool and public school tracking systems.

HHS is recruiting senior citizens to spy on their own physicians by offering a reward of up to $1000 if they call the toll-free "Fraud Hotline" and file a report that leads to a monetary "recovery" from their doctor. The harassment potential is enormous when 39 million seniors start trying to collect a bonus if the doctor's office enters the wrong code number on a Medicare form.

All this government monitoring is allegedly for the purpose of locating terrorists, money launderers, drug kingpins, Medicare and welfare cheats, student loan delinquents, and deadbeat dads. But the reach of this monitoring goes far beyond what is necessary to achieve its purported objectives. Only totalitarian regimes monitor the private actions of law-abiding citizens.

We should prohibit the government from building databases of personal information on American citizens that is none of the government's business. And when the information is the government's business, the information should be allowed to be used only for the purpose for which we give it.

STATEMENT OF ED MIERZWINSKI, CONSUMER PROGRAM DIRECTOR, UNITED STATES PUBLIC INTEREST RESEARCH GROUP

Senator SHELBY. Mr. Ed Mierzwinski, go ahead.

Mr. MIERZWINSKI. Thank you, Senator——

Senator SHELBY. Public citizen.

Mr. MIERZWINSKI [continuing]. Shelby. That is correct.

Mr. MIERZWINSKI. Senator Shelby, Senator Bennett, my name is Edwin Mierzwinski. I am Consumer Program Director for the United States Public Interest Research Group, a consumer advocacy organization. And my testimony today is on behalf of both USPIRG and Ralph Nader.

And I apologize Mr. Nader could not be here today. As you know, he has been a longtime supporter of privacy interests and appeared with you last summer at one of your press conferences—and Ms. Schlafly—at a press conference on the Financial Privacy bill. So, he apologizes, but he strongly supports your legislation.

I also want to commend you, before I start, on your ongoing support for privacy. Your development of the Privacy Coalition forged between a family-based consumer and civil liberties organizations that has worked, first, on the Know Your Customer regulations, to oppose those.

Second, on trying to achieve a financial privacy opt-in. And we will continue to fight with you to achieve that.

And finally, your founding of the Bicameral/Bipartisan Congressional Privacy Caucus that has already shed light on a number of intrusive privacy practices.

My testimony—my written testimony summarizes all of my remarks, in detail. I will just be very brief.

The Shelby Amendment is important for the following reasons: First, citizens deserve control over their personal and confidential information, particularly when it is going to be used for unrelated secondary purposes.

We believe that in such circumstances, government agencies—whether state or federal—should comply with fair information practices. And that means, among other things that I outline in my testimony, that consumers ought to provide express consent before their information is used for any secondary purpose, particularly a commercial purpose which is not related to the purpose for which it was collected.

Second, as you pointed out in your opening remarks, this requirement is particularly strong when the information is compelled to be provided. The government requires consumers to provide these pieces of information. In that circumstance, we believe that it is increasingly more important that the information be subject to an opt-in, rather that a weak opt-out.

The other reason that your amendment is so critically important is that since the 1994 Driver's Privacy Protection Act was enacted, we have come to find that there are additional privacy invasions, such as the sale of digitized photographs of citizens to third-party marketing and commercial entities, such as Image Data of New Hampshire. And the fact that these new uses of data have come to light, just means there are more important reasons that we need to enact your stronger protections.

And finally, the other—the other issue is whether an opt-out actually can and does work. And in my testimony, I go into great detail as to a number of the problems with opt-outs. The industry has, as you know, succeeded in a number of commercial areas in

creating what they call a sector-by-sector approach to privacy—find a problem, solve it, but do not impede commercial interests with a broad right of privacy.

Well, consumer groups think that the convergence of industry sectors that is occurring in society today means that we, in fact, do need to enact a broad right of privacy, but notwithstanding that, if you look at all of the opt-out programs that the industry has provided, whether voluntary programs of the Online Privacy Alliance or the Direct Marketing Association, we believe that they are designed not to protect privacy, but to protect commercial interests. We believe that they are designed to fail.

One statutory opt-out that I find particularly outrageous is one that I worked for many years to enact amendments to the Fair Credit Reporting Act to strengthen consumer rights in credit reports.

Every year, consumers receive 3.5 billion credit card solicitations by mail. They receive those generated from companies looking at your credit report and deciding that you qualify for a credit card offer.

We sought to require that credit reports only be used for that purpose, on an opt-in basis. Of course, consumer groups failed and the anti-privacy interests prevailed. They succeeded in changing that to a weak opt-out.

You must look at each of those solicitations you receive in the mail; you must look at the back of the solicitation; you must find the telephone number to call; you must figure out that the obtuse language that they use actually means that they are giving you a right to opt-out; then, when you call them on the phone to opt-out, your opt-out is only guaranteed for two years.

If you choose to opt-out forever, which I believe should be your right, you must ask them and request a "signed notice of election," and then receive it in the mail and send it back for your opt-out to continue past the two-year period.

And that is the example that I think just proves that opt-outs are designed to fail.

In summary, USPIRG strongly supports the Shelby Amendment; believes that there is no public policy reason that it should not be implemented on the first of June. And we, again, want to commend you for your leadership and the fact that you have demonstrated that privacy is an issue that—that effects all Americans on all sides of the political spectrum. And ultimately, I believe we will prevail.

Thank you.

Senator SHELBY. Thank you.

STATEMENT OF SUSAN HERMAN, EXECUTIVE DIRECTOR, NATIONAL CENTER FOR VICTIMS OF CRIME

Senator SHELBY. Ms. Susan Herman, National Center for Victims of Crime.

Ms. Herman.

Ms. HERMAN. Good morning, Mr. Chairman, Senator Bennett.

My name is Susan Herman. I am the Executive Director of the National Center for Victims of Crime.

The National Center works with 10,000 organizations across the country to help victims of crime rebuild their lives.

Thank you for inviting me to address the important issue of privacy of personal information; specifically, how releasing motor vehicle records impacts victims of crime.

In 1994, the landmark Driver's Privacy Protection Act required states to give licensed drivers the option to keep their contact information confidential, limiting disclosure to narrowly defined purposes. As a result, victims of stalking, battered women, and intimidated witnesses—who need to conceal there whereabouts—were better able to protect themselves.

Unfortunately, because many states required affirmative requests to keep information confidential, many people were still at risk. Without making such a request—perhaps not knowing the option existed—personal information remained available to anyone able to pay a nominal fee.

Amy Boyer, a young New Hampshire woman, did not know her life was in danger. Her stalker, a man she barely knew in junior high school, used the Internet to get information about her workplace and her license plate number. With just two pieces of information purchased from the Internet companies, he found her and killed her. She never knew she was at risk. Amy Boyer never knew she needed protection.

And over the last few years, we have the emergence of a new pernicious crime—identity theft. It thrives on access to personal information.

Identity theft can happen without your knowing it. Your financial security can be shattered. And victims who obtain a criminal record via identity theft have a particularly difficult time clearing their names.

Mr. Chairman, because of your efforts last year, the law was amended to change the opt-out provision to an opt-in provision. In other words, individuals now have to affirmatively waive confidentiality. We applaud you. This effort will prevent harm.

Since enactment of this historic legislation, however, the National Center has come to believe that the scales have tipped much further in the direction of full protection of privacy. Based on our work with victims of stalking, domestic violence and identity theft, we recommend that the DPPA be amended again to protect victims. There should be no options. Drivers' personal information should never be released, except as outlined in the Act.

The National Center operates a Help Line for victims of all types of crime. A large percentage of calls come from stalking victims. One of their principal concerns is that they do not know why they were targeted or how they were found. This is especially true in the 40 percent of stalking cases that do not arise out of a domestic situation.

Victims of stranger stalking, at the time they were asked whether the government could release their personal information, may have had no reason to opt for privacy. How many people know that one in twelve women and one in forty-five men in America will be stalked during their lifetime?

We also hear from victims of identity theft, who tell us they, too, never realized they were vulnerable. They were simply undergoing

normal everyday activities, and their social security number or other information fell into the wrong hands. Like the stalking victims, identity theft victims had little reason to believe they needed to protect their records when they made their opt-in/opt-out decision. How many people know that each year more than 400,000 Americans will be victims of identity theft?

Viewed from a victim's perspective, the opt-in/opt-out decision we are now offered really only helps people who know they are in danger or understand the risks we all face. We have heard from too many victims who realized too late that their personal information can be used to harm them.

That is why, on their behalf, we respectfully request that drivers' personal information, with rare exception, never be released.

In the alternative, we would urge this committee to consider legislation that would require states to notify individuals whenever their information has been released. When citizens give their government the right to release personal information, the government should have an obligation to inform them every time information is released and to whom it is released.

Last year, this committee amended the Transportation Appropriations bill to include social security numbers within the scope of protected information. Now social security numbers, like addresses, cannot be released without permission. It is unclear, however, what effect this will have on those states that use social security numbers for the driver's license number, or states that show the social security number on the face of the license. That number is then available every time an individual writes a check, boards a plane or enters a secured building.

States should also be prohibited from including social security numbers on licenses. In this age of technology and identity theft, no one should be required to display their social security number to countless strangers in the course of everyday life.

In summary, we believe the government should not release personal information. If this practice continues, however, the government should at least notify individuals whenever it does release information. And to further decrease the risk of danger, social security numbers should be removed from licenses.

Thank you for the opportunity to address you today on this critical issue. We look forward to working with you as you develop proposals.

[The statement follows:]

PREPARED STATEMENT OF SUSAN HERMAN

Good morning, Mr. Chairman, and members of the Subcommittee. My name is Susan Herman, and I'm the Executive Director of the National Center for Victims of Crime. The National Center works with 10,000 organizations across the country to help victims of crime rebuild their lives.

Thank you for inviting me to address the important issue of privacy of personal information, specifically, how releasing motor vehicle records impacts victims of crime.

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Over the last few years, we have seen the emergence of a new pernicious crime—identity theft. It thrives on access to personal information.

In Florida, a woman obtained a fraudulent driver's license in the victim's name. She used the license to withdraw more than $13,000 from the bank, obtained five department store credit cards, and charged nearly $4,000 in the victim's name.

Identity theft can happen without your knowing it. Your financial security can be shattered. And, victims who obtain a criminal record via identity theft have a particularly difficult time clearing their names.

Mr. Chairman, because of your efforts last year, the law was amended to change the "opt out" provision to an "opt in" provision. In other words, individuals now have to affirmatively waive confidentiality. We applaud you. This effort will prevent harm.

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Thank you for the opportunity to address you today on this critical issue. We look forward to working with you as you develop proposals.

Senator SHELBY. Thank you.

STATEMENT OF GREG NOJEIM, LEGISLATIVE COUNSEL, AMERICAN CIVIL LIBERTIES UNION

Senator SHELBY. Mr. Greg—is it Nojeim?

Mr. NOJEIM. Yes.

Senator SHELBY. You say it. You pronounce it. Is that right?

Mr. NOJEIM. I say it "Nojeim," too.

Senator SHELBY. Nojeim. Great. American Civil Liberties Union. We welcome you here today, sir.

Mr. NOJEIM. Thank you, Senator Shelby, Senator Bennett. It is a pleasure to be here today to testify on behalf of the ACLU.

The ACLU is a nationwide, nonpartisan organization consisting of over 275,000 members dedicated to protecting the principles of privacy and other—and freedom that are set forth in the Bill of Rights.

And Senator Shelby, I want to salute you, also, for your leadership in this area. You have been a stalwart defender of privacy. And we look forward to working with you and the other members of the privacy caucus on this and other issues in the future.

It should not take a tragedy—it should not take a tragedy for Congress to act to protect a person's individual privacy, and yet, time and time again, it does take a tragedy.

We have heard of victims of crime that prompted Congress to enact the Driver's Privacy Protection Act in the first place. And we heard that a Nashua, New Hampshire company committed its own privacy tragedy by trying to collect up the images of 22 million drivers—eventually, they wanted the images of all the drivers in the country—so that they could provide access to those images to businesses that, for legitimate reasons, wanted to prevent fraud.

You know, when drivers heard about that, they were outraged. And it really went against one of the most fundamental principles of fair information practices that Mr. Mierzwinski mentioned earlier. That principle is that information given to the government for one purpose, ought not to be used for another purpose without the authorization of the person to whom that personal information pertains.

Well, the Driver's Privacy Protection Act did a lot to advance that principle, but because of loopholes in the Act, it has fallen short. One of those loopholes allows for disclosure of a driver's personal information in response to an individual request or for bulk distribution for marketing, solicitations and surveys, if the driver is given notice and a chance to opt-out of dissemination of the driver's personal information.

Another loophole—the one that Image Data used—allowed for the distribution of a driver's personal information for use in the normal course of business by a legitimate business—whatever that means—to pursue debtors and to verify information submitted to the business.

I think that Governor Jeb Bush, the governor of Florida, summed up drivers' sentiments best about the Image Data mini-scandal, when he said, "I am personally not comfortable with the state mandating license photos for the purpose of identifying authorized driv-

ers, then selling those photos at a profit for a completely different purpose."

Every state that participated in that plan was flooded with citizen complaints. And every state that participated in that plan called it off, as a result.

Now, in an effort to prevent a recurrence and other abuses, Congress, under your leadership, Senator Shelby, enacted two additional privacy protections in the Transportation Appropriations Act for fiscal year 2000.

The first effectively requires states to obtain express consent before releasing a driver's photograph, social security number, or medical and disability information. In other words, those were given special additional protections because of their sensitivity. However, to have the desired effect, this new protection would have to be reenacted every year.

The second 1999 enhancement is permanent. It amounts to amendments to the Driver's Privacy Protection Act to require the express consent of a driver before a state DMV releases any personal information, such as address, gender and age, whether it is in bulk, for marketing, or pursuant to an individual, so-called, look-up request.

The ACLU supports these changes. As a practical matter, the opt-out approach offers much more limited protection than does an opt-in. I like to call opt-out—the opt-out approach, "presumed consent." Unless the driver acts, consent to dissemination of the driver's personal information is presumed.

Likewise, an opt-in could be viewed as requiring true consent. The 1999 changes to protect driver privacy went a long way toward turning the DPPA into a true consent stature. However, more needs to be done. We recommend five additional steps.

First, to fully secure the additional—the additional protections the 1999 changes afforded drivers—photographs, social security numbers, and medical and disability information—those changes should be made permanent.

Second, Congress should plug as many of the remaining loopholes in the Driver's Privacy Protection Act as is practicable.

Third, Congress should ensure that the Driver's Privacy Protection Act is enforced. We recommend that the GAO be asked to conduct a state-by-state survey, effective June 1, to identify—for potential civil penalty under the Driver's Privacy Protection Act—the states that are not in compliance with the Act.

In addition, Congress should make it clear, beyond doubt, that failure to comply with the DPPA will result with withholding of a portion of a state's federal highway money.

Fourth, we ask that Congress repeal a mandate that Congress itself imposed on the states, to collect drivers' social security numbers on the application forms for drivers' licenses.

At roughly the same time Congress acted to promote driver privacy by enacting and improving DPPA, Congress enacted other legislation that undermines the very principle upon which the DPPA rests; that is the principle that information submitted to the government for one purpose, ought not be used for another without consent.

You know, social security numbers were originally authorized for one purpose, and that was to track contributions to the Social Security Trust Fund. Instead, they have morphed into what can only be described as a universal citizen identifier.

Congress enacted two laws in 1996 to require the states to collect drivers' social security numbers and keep them in their records. Now, Congress did take one step last year to repeal these anti-privacy mandates.

First—and that step was to repeal Section 656(b) of the 1996 Illegal Immigration Reform and Immigrant Responsibility Act. That section would have required states, among other things, to demand drivers' social security numbers on drivers' licenses and application forms, but Congress left in place the mandate to collect the social security number that appeared in the Welfare Reform Act, as amended by the Balanced Budget Act of 1997.

Finally, Congress should insist that states implement the 1999 privacy protections relating to the Driver's Privacy Protection Act without delay. These provisions became law almost six months ago. For the most part, the states were given eight months to implement the provisions.

Special steps were taken for states that have legislatures that do not meet this year. They were given an exception, so that they could implement 90 days after they next meet.

For states that challenged the Driver's Privacy Protection Act all the way to the Supreme Court in Reno v. Condon, these states were given 90 days after that case was decided.

Today, more than a full year after Colorado, Florida, and South Carolina stirred up citizen outrage by proposing to sell millions of their drivers' photographs without consent, no provision of federal law is in force to barr such an abuse in the future.

PREPARED STATEMENT

Now, more than ever, Congress must insist on prompt compliance with the law to protect the privacy of drivers' personal information.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF GREGORY T. NOJEIM

Chairman Shelby, Ranking Member Lautenberg and members of the Subcommittee: I am pleased to testify before you today on behalf of the American Civil Liberties Union about amendments to the Driver's Privacy Protection Act adopted last year. The ACLU is a nation-wide, non-profit, non-partisan organization consisting of over 275,000 members dedicated to preserving the principles of freedom set forth in the Bill of Rights.

Today I will identify the abuses that lead Congress to enact the Driver's Privacy Protection Act and the 1999 amendments to the Act. I will explain that the ACLU supports both because they can protect the privacy of the information drivers submit in order to obtain driver's licenses. I will also suggest additional steps Congress should take to close loopholes in the DPPA and ensure that drivers secure of the privacy benefits of the DPPA, including the 1999 amendments.

THE DRIVER'S PRIVACY PROTECTION ACT

An obsessed fan who had obtained the address of actress Rebecca Shaeffer from the California Department of Motor Vehicles (DMV) stalked and murdered Ms. Shaeffer. She had taken steps to protect her personal information. She had paid to keep her home phone number unlisted. She was careful about giving out her ad-

dress. Yet, when she applied for a California driver's license, she had no idea that California would freely sell the information she had tried to keep private.

In response to the killing, Congress enacted the 1994 Driver's Privacy Protection Act (18 U.S.C. 2721–2725) to require states to protect the privacy of the information that drivers submit in order to obtain a driver's license. This information includes the driver's name, address, phone number, Social Security Number, driver identification number, photograph, height, weight, gender, age, certain medical or disability information, and in some states, fingerprints. The DPPA does not extend privacy protection to information relating to a driver's traffic violations, license status, and accidents.

The ACLU supported the Driver's Privacy Protection Act. We testified in 1994 that although that state DMV records had traditionally been open to the public, this could no longer be justified. We acknowledged that access to government information fosters democracy and enhances personal freedom. It encourages informed citizen participation in the governing process, promotes accountability of government employees, deters government abuse, and instills public confidence in government through increased awareness. However, we believe that access to personal information collected and maintained by state DMV's does not substantially advance these goals and thus does not meet the criteria necessary to be made available under an open-records policy. We believe that the individual's interest in avoiding the disclosure of personal information outweighs the public interest in disclosure in this context.

As we indicated in 1994, state DMV records ought to be treated with protections similar to the protections afforded federal records subject to the federal Privacy Act of 1974. Its central principle is that personal information collected by the government for one purpose may not be used for another purpose without the consent of the person to whom the information pertains. As applied to drivers' records, this would mean that information submitted by an applicant in order to obtain a driver's license could not be used for another purpose without the express consent of the driver.

LOOPHOLES IN THE DPPA COMPROMISE ITS PRIVACY PROMISE

The DPPA fell short of this ideal because loopholes in the Act have proven problematic. There is no way under the Act for a driver to prevent disclosure of personal information when a loophole applies. Among others, there is a loophole for:

—Each government agency to use personal information in the state's DMV records "in carrying out its functions" 18 U.S.C. 2721(b)(1);
—"Performance monitoring of motor vehicles" 18 U.S.C. 2721(b)(2);
—"Use in connection with . . . any investigation in anticipation of litigation" 18 U.S.C. 2721(b)(4);
—"Use in connection with the operation of private toll [roads]" 18 U.S.C. 2721(b)(10);
—"Use by an employer or insurer to verify information relating to the holder of a commercial driver's license" 18 U.S.C. 2721(b)(9); and
—Any other use authorized by state law "related to operation of a motor vehicle or public safety" 18 U.S.C. 2721(b)(14).

The DPPA also included other overly broad loopholes. It allowed for disclosure of a driver's personal information in response to an individual request, or for bulk distribution for marketing, solicitations and surveys, if the driver is given notice and a chance to "opt out" of the dissemination of the driver's personal information. 18 U.S.C. 2721(b)(11) and 2721(b)(12). Another loophole allowed for the distribution of a driver's personal information for use in the normal course of business by a "legitimate" business to pursue debtors who had provided inaccurate or outdated information, and to verify the accuracy of information submitted by an individual to the business. 18 U.S.C. 2721(b)(3).

ABUSE OF DRIVERS' PERSONAL INFORMATION

This latter loophole has led to abuse. Last year, a Nashua, New Hampshire company tried to exploit this loophole by purchasing from state DMV's the images and other personal information about 22 million drivers in order to build a national drivers' database. Once a sufficient number of drivers' images were purchased—often for a penny a piece—Image Data, LLC would have made its database available for a fee to businesses seeking to prevent fraud by retrieving the photograph of any customer using a credit card or a check. Image Data and South Carolina, Colorado and Florida, which had contracted with it to sell their drivers' personal information without consent, apparently took the position that the sale facilitated business use to verify the accuracy of personal information submitted to the business, and thus

fit within the 2721(b)(3) loophole. This justification was called into question when it was revealed that the Secret Service had helped fund the drivers' photo database in an apparent effort gain access to the database to fight immigration fraud and airport terrorism.

Drivers were outraged when they learned that their photographs and other information were being sold without their consent to create a national database of driver images.

Florida Governor Jeb Bush probably summed up drivers' sentiments best when he reportedly said, "I am personally not comfortable with the state mandating license photos for the purpose of identifying authorized drivers, then selling those photos at a profit for a completely different purpose." Every participating state was flooded with citizen complaints about privacy. And every participating state called off the sale.

1999 AMENDMENTS TO THE DRIVER'S PRIVACY PROTECTION ACT

In an effort to prevent a recurrence and other abuses, Congress enacted two additional privacy protections in Section 350 of the Transportation Appropriations Act for fiscal year 2000, Public Law 106–69. The first lasts only as long as the highway money Congress appropriated in the law. It effectively requires states to obtain express driver consent before releasing the driver's photograph, Social Security Number, or medical or disability information. Exceptions to the new rule were provided for law enforcement and the execution of judgments, insurance claims investigations and underwriting, organ donation programs, and verification of information relating to the holder of a commercial driver's license. Thus, this sensitive information cannot be released for a different use authorized under the DPPA without the driver's express consent. To have the desired effect, this new protection would have to be re-enacted each year because it was tied to money appropriated in the Transportation Appropriations Act for Fiscal Year 2000.

The second 1999 enhancement of driver privacy is permanent. Congress amended the Driver's Privacy Protection Act itself by requiring the express consent of a driver before a state DMV releases any personal information such as address, gender and age, in bulk for marketing, solicitations and surveys. Congress also amended the DPPA to require express consent for the release of personal information about a particular individual—as opposed to a bulk distribution—for any purpose not mentioned as an exception in the DPPA itself. Previously, such information would be released pursuant to a request for an individual's information, or a request for bulk distribution for marketing purposes, if the individual had failed to "opt out" of the disclosure.

The ACLU supports these changes to protect driver privacy. By requiring express consent as a condition of dissemination of personal information in many circumstances, Congress made the DPPA more closely resemble the federal Privacy Act and other legislation protecting the privacy of information in record systems maintained by governmental entities. As a practical matter, the "opt out" approach offers much more limited protection than does an "opt in." I like to call the opt out approach, "presumed consent." Unless the driver acts, consent to dissemination of the driver's personal information is presumed. Likewise, the "opt in" could be viewed as requiring "true consent"—an expression of consent prior to the sharing of information. The 1999 changes to protect driver privacy went a long way toward converting the DPPA from a "presumed consent" into a "true consent" statute. However, more needs to be done.

ADDITIONAL STEPS CONGRESS SHOULD TAKE TO PROTECT DRIVER PRIVACY

Make 1999 Protections Permanent.—First, to fully secure the additional protections the 1999 changes afforded for drivers' photographs, SSNs and medical and disability information, Congress should make the changes permanent. This would not only protect driver privacy, it would give states additional certainty with respect to the rules they would be required to follow in the future. In the alternative, Congress should ensure that this year's transportation appropriations bill carries forward the good work Congress began last year to protect drivers' photographs, SSNs and medical and disability information.

Plug Loopholes.—Second, Congress should plug as many of the remaining loopholes in the Driver's Privacy Protection Act as is practicable.

Beef Up Enforcement Efforts.—Third, Congress should ensure that the Driver's Privacy Protection Act is enforced. The DPPA allows the Department of Justice to seek civil penalties of $5,000/day under 18 U.S.C. 2723(b) from states that fail to comply with the DPPA. To our knowledge, no state has been fined for failure to comply. However, in the legislature of at least one state—Minnesota—steps are report-

edly being taken to prohibit state implementation of the true consent provisions Congress adopted last year unless the federal government fines the state for noncompliance. 26 Access Reports No. 4, pp. 3–4 (February 23, 2000). Now that the Supreme Court has unanimously upheld the DPPA as a proper exercise of Congressional authority., (*Reno* v. *Condon*, No. 98–1464 (January 12, 2000)), Congress should call on the Government Accounting Office to conduct a state-by-state survey to identify for potential civil penalty the states that are not in compliance.

However, fines may not be enough. States may attempt to challenge the imposition of fines by the federal government on sovereign immunity grounds. In addition, states may argue that the fines only apply to violations of the DPPA, and thus are not applicable with respect to the 1999 protections afforded SSNs, photographs, and medical information. These additional protections do not appear in the text of the DPPA. Moreover, while we believe that the 1999 privacy enhancements require states receiving federal highway funding to comply with the DPPA and the 1999 changes, some have disputed that. As a result, we recommend that Congress make it clear beyond doubt that failure to comply will result in the withholding of a portion of a state's federal highway money.

Repeal SSN Solicitation Mandate.—At roughly the same time Congress acted to promote driver privacy by enacting and improving the DPPA, Congress enacted other legislation that undermines the very principle upon which the DPPA rests. That is the principle that information submitted to the government for one purpose ought not be used for another purpose without the consent of the person to whom it pertains. This other legislation requires the states to demand drivers' Social Security Numbers on driver's license application forms.

Social Security Numbers were originally authorized to help the government keep track of contributions made to the Social Security trust fund. At the time they were authorized, a promise was made that the numbers would not become universal identifiers. This promise has been broken repeatedly. Each time it is broken, personal privacy is compromised by linkage of data files reliant on the SSN.

In Section 317 of the 1996 Personal Responsibility and Work Opportunity Act (Public Law 104–193), Congress effectively required the states to ask applicants for commercial driver's licenses, occupational licenses and marriage licenses to provide their SSNs on the application form. In Section 5536 of the Balanced Budget Act of 1997 (Public Law 105–33), Congress extended the requirement to cover all driver's licenses, as well as hunting, fishing and other recreational licenses. The purpose of the legislation was to help track down parents who had failed to pay child support. The effect was to diminish the privacy of all license applicants, including the vast majority who do not owe child support.

Congress should do its part to protect driver privacy by repealing this anti-privacy mandate to the states. This would complete the work Congress began last year in the Transportation Appropriations Act for fiscal year 2000 when it repealed Section 656(b) of 1996 Illegal Immigration Reform and Immigrant Responsibility Act. That section would have, among other things, required states to demand drivers' SSNs on drivers' license application forms. In other words, while one federal requirement that states solicit drivers' SSNs was repealed, another was left in place. Congress should finish the job.

Reject Calls for Delay.—Finally, Congress should insist that states implement the 1999 privacy protections relating to the Driver's Privacy Protection Act without delay. These provisions became law almost six months ago. For the most part, they must be implemented by June 1, 2000—nearly 8 months after they became law.

Congress went to great lengths to accommodate the special circumstances faced by some states. For the six states whose legislatures were not scheduled to meet this year—Arkansas, Montana, Nevada, North Dakota, Oregon and Texas—Congress extended the deadline to the date 90 days after the legislature next convenes. For the three states which had challenged the Driver's Privacy Protection Act in the Supreme Court—Wisconsin, South Carolina and Oklahoma—Congress allowed 90 days after the Supreme Court rendered its decision in *Reno* v. *Condon.*

Today, more than a full year after Colorado, Florida and South Carolina stirred up citizen outrage by proposing to sell millions of their drivers' photographs without consent, no provision of federal law is in force to bar such an abuse. This is a recipe for disaster. Enticed by the millions of dollars of revenue that sale of personal information generates for some states, absent a signal from Congress, a repeat performance is almost a certainty. Now more than ever, Congress must insist on prompt compliance with the law to protect the privacy of drivers' personal information.

Thank you.

Senator SHELBY. Thank you.

Just an observation: I think it is rare when you have the Eagle Forum, the Public Citizen, the National Center for Victims of Crime, the ACLU to sit here together, on the same panel, and even more rare that you agree on this issue of public policy that affects every American. I think that you are to be commended.

What is so compelling about this privacy issue that resonates with all four of your organizations? We will start with you, Ms. Schlafly.

Ms. SCHLAFLY. It is a growing issue. It is new. It has just come about in the last few years. And I think people are realizing the power of the databases to gather all of this personal information.

And in my full testimony, I pointed out it is in banking; it is in travel; it is in cell phones; it is in the employment records, drivers' licenses, censuses—all of these areas. And we are very rapidly approaching the time when it will be very easy for the government to mix all of these databases.

And then it is a power to control us. In the totalitarian systems, they had all of these files in manilla folders, and they had a secret police and a method of having family members snoop on each other, but it is all so easy now with the technology.

And I think there is simply a growing realization of what is going on.

Senator SHELBY. Mr. Mierzwinski.

Mr. MIERZWINSKI. Thank you, Senator.

I go back to Justice Brandeis, when he said that privacy, the right to be left alone, is the right most cherished by civilized men and women.

I just think that our organizations, from all parts of the political spectrum, have recognized what nearly every other country has recognized, and that is that privacy is a freedom, that privacy is a liberty, and that these large databases of information, whether they belong to the government or whether they belong to private interests, are infringing on that liberty or freedom.

Privacy should not be for sale, and that is what we agree on.

Senator SHELBY. Ms. Herman, you bring an added perspective here as a representative of the victims of crime. We all want to be safe, but a lot of this information will make us unsafe, as you pointed out.

Ms. HERMAN. Thank you, Senator.

I think it is—it is very clear to us why this issue is compelling, because we hear from victims everyday. There is no confusion among people who work with victims of crime that releasing personal information leads to death. Stalkers, identity thieves are dangerous individuals. Technology has enhanced their ability to reach their victims. Selling, distributing, releasing personal information only increases the chances that we will have more victims.

Senator SHELBY. Mr. Nojeim.

Mr. NOJEIM. First, I want to say that there is a benefit in openness by the government, and that there are—there is a Freedom of Information Act in most States, and certainly at the Federal Government level.

The issue is, as Senator Bennett said, trying to balance privacy interests as against the interests in keeping government accountable to the people. And in the case where personal information is

primarily what is in the database, we believe that the interests in keeping that private—keeping that information private, trump the interests in, you know, good government and open government and sunshine.

It used to be that the Fourth Amendment was good enough to protect people's privacy, because most of the private things that you had were kept within your home. If they were outside your home—somebody learned them because of a transaction that you did—it was very difficult to gather all of that information together.

Today, a point and a click, and you can gather all of that information together. And I think that is why the privacy issue is really starting to resonate in this country.

Senator SHELBY. Ms. Schlafly, is the basic issue, with regard to the treatment of personal information collected by the government, one of who controls the use of such information in the commercial area?

Ms. SCHLAFLY. Well, I think the individual should control his own information about his identity, his name, his picture. And you give it for specific purposes, or in the case of the government, it is demanded for—and required for specific purposes.

But yes, I think the basic issue is: Who does it belong to? And it does not belong to the government. It does not belong to the—even the commercial entities that are gathering it for a specific purpose.

And I think that is a—it is a tremendous and growing issue that people are just beginning to realize. More and more people are deciding they want to pay cash, so it is not recorded what—on somebody's database, what they are buying.

And we find that—well, the government made a payment to Northwest Airlines to set-up a software to monitor our travel. Well, should government be doing that?

We just do not think we want to live in a society where government is monitoring the daily activities of law-abiding citizens.

Senator SHELBY. Mr. Mierzwinski, earlier, you were talking about the opt-in and opt-out approach. Is not the opt-out approach dealing with financial records and so forth? Is that not a sham, in a sense? In other words, they know what that is. They know that the average person does not know about that and it is difficult to opt-out.

Mr. MIERZWINSKI. The opt-out approach, in my view, is designed to fail. It is set up as a sham. And consumers do not usually have any idea that they have a right to opt-out.

As you so eloquently opposed the—in the Financial Modernization Act that Congress passed last year, that Act allows companies which are merging with all kinds of affiliates, have all kinds of subsidiaries, to share their information among each of their affiliates and subsidiaries, and even with many third-parties, without even granting you an opt-out.

Then, in some limited circumstances, that bill provides for a limited opt-out.

Consumers have no idea how their information is being shared; how their information is being sold. And opt-outs are—are simply designed to fail. And that is why so few consumers participate in even the existing opt-out programs that exist.

That is why we believe that the only way to really and truly protect privacy is to have meaningful protection by providing expressed consent through an opt-in.

Senator SHELBY. Senator Bennett.

Senator BENNETT. Thank you, Mr. Chairman.

I want to thank all of the witnesses. As I said in my opening statement, this is a difficult challenge to get the right kind of balance. And Ms. Schlafly, you are exactly right. Technology is bringing it home in a way that it never was before.

If I may be—be a little bit—give a little bit of personal history, I used to work for the J. C. Penney Company. And they—to show you how old I am, they had just initiated, when I went to work for them the—for them, brand new experience of a credit card. Prior to that time, it was strictly cash at J. C. Penney. We used to joke that the "C" in J. C. Penney stood for "Cash." That is true. That was his middle name—Cash—James Cash Penney.

Anyway, I asked the question of the leadership of the company at that time about this new phenomenon of generic credit cards. VISA and MasterCard, they did not exist at that time. This was prior to the VISA, but people were putting out generic credit cards.

And I remember the CEO saying, "We do not ever want to have—anybody have a generic credit card at Penney's. We want them to have the Penney card, only."

And I said, "Why is that?"

And he said, "Because we want to own the information of the shopping habits of our customers. We do not want some outside organization to—to know what our customers buy." And then he said, "Because we will know what our customers buy, we will be able to target our advertising more efficiently and beneficially for the customer. In other words, we will not try to sell a housewife who buys soft goods and children's clothing, automobile batteries and television sets, because we will know that that particular customer is interested in this brand of goods. Since we are a full-service department store, it would be inefficient for us to sell—send every customer every flyer that we have on every type of goods that we sell. We can target the advertising to the benefit of the customer."

Well, the customer demanded that the Penney Company honor MasterCard and VISA, because it became a matter of customer convenience. The customer said, "I do not want to go to the Penney store and not be able to use my MasterCard."

And very reluctantly, customer demand caused Penney to back away from their original position that said, "We will not have any credit information, except with our own customers, that will be held within our own company."

And it is an illustration of how the customers come along and change things as to people's perception.

My concern is—is summarized, I think, in that—that vignette, because I want the customer to know the advantages that are available in the modern world and to make an informed decision.

You talked, Mr. Mierzwinski, about the customer does not understand the opt-out. And I think you are right in many instances to have an opt-in, but it is not properly explained to them.

I am a little concerned that the opt-in is not going to be properly explained to them, because there are some advantages for my infor-

mation to be in the right place. I do not like to be flooded by catalogs for stuff that I never, ever buy.

But I get flooded, because people sell the lists, and they say, "Gee, he has got these kinds of demographics, he has got this kind of an income platform, maybe he would love my bamboo gazebos from the Phillippines, because he can afford it." And they send me those kinds of weird catalogs. I do not want those catalogs.

And if more information—if I opted in—and had more information about me, some catalog people would say, "Gee, he does not buy that stuff at all. We will never send him—we will never send him a cigar catalog, because we know he is a non-smoker."

And therefore, I am benefitted. Without information, I can be disadvantaged. That is the balance that we have to strike here.

Now, Mr. Nojeim, I am interested—the ACLU sells its list. And I would like to read to you the ACLU policy here and talk about this whole thing.

I am quoting from the American Civil Liberties Union Magazine. You say, "The ACLU defrays the cost of our new member recruitment by renting our list to other non-profit organizations and publications."

In other words, you are making the decision as to who should have access to your list. I am not, if I join you.

"Never to partisan political groups or to groups whose programs are incompatible with ACLU policies." I salute you for that. The PBS should do that when they sold their list to the Democratic National Committee. They got themselves in trouble that you are avoiding.

"All lists are rented or exchanged according to strict privacy procedures recommended by the U.S. Privacy Study Commission. We never give our list directly to any organization. Instead, we send the list to a letter shop that prepares the mailing for the organization that is participating in the rental or exchange. That organization never sees our list and never knows what names are on it, unless an individual responds to the organization's mailing." I applaud you for that kind of protection.

"The ACLU always honors a member's request not to make his or her name available. If you do not wish to receive materials from other organizations, write to the ACLU Membership Department, and we will omit your name from list rental or exchange. Thank you for your understanding."

So, you have chosen the opt-out, but you have put in certain controls that you advertise to your members, saying we will not make our list available to the Democratic National Committee, the Republican National Committee, whatever, or anybody that is not compatible with ACLU policies.

This is an informed kind of choice. I think it is in—written in very clear language.

Can you discuss this whole issue with me, if I want to make an informed choice as to how my information is distributed, how do I do it under the opt-in provisions, or is the opt-in going to be the flip side of what you are talking about of opt-out—so complicated and so weighted down with legal language that I could never understand it?

Mr. NOJEIM. First, there is a difference between a private organization and government. In the case of a government, there should be——

Senator BENNETT. I understand that. I am not accusing you of hypocrisy here. I am——

Mr. NOJEIM. No. Let me just—let me just finish. There should be—there should be a presumption that it would be an opt-out; that there would be additional protections, because it is a government, as opposed to a private organization.

And I do not think it would be particularly confusing to operate on an opt-in basis. In fact, I think that, Senator Bennett, you described very well the benefits that a consumer might choose to have on an opt-in.

A consumer—if it is explained to the consumer that "The reason we want you to opt-in and allow us to share your information is because we would like to market to you and ensure that you receive things that we think are tailored to your interests. Check here, if you would like to receive these—these offers." I think that is pretty simple and pretty clear, and that it could be done that way.

Senator BENNETT. Let us talk about the driver's license for just a minute. I agree, by the way, absolutely. I cannot conceive of any circumstance where a photograph should be made available to anybody, particularly, Ms. Herman, in the area that you are talking about.

I have held hearings on the issue of identity theft. And unfortunately, a particularly attractive woman drives down the street, someone sees her in the car, takes down her license number, and then has the ability to find out where she lives. No. That is—clearly, we need to do everything we can to prevent that kind of thing from happening.

On the other hand, I buy a new car—I have had this experience and maybe some of the rest of you have—I buy a new car. And the manufacturer knows who I am, and starts to send me information about options that I can buy directly from the manufacturer to add to the automobile.

There are other manufacturers that have things that could add to the automobile that cannot know that I own a Ford or Chrysler or what have you, that I might like to hear from. Is there any way that the Department of Motor Vehicles can say to me, "We would be willing to share with people who manufacture options for your Chrysler minivan, the fact that you own a Chrysler minivan."

Mr. NOJEIM. Sure. Check here. I think that is the way that Maryland does it, now. And you will be hearing from the Maryland witness in the next panel. But asking—telling them "This is what we want to use that information for. This is the benefit we expect you to get." You might even have something that says, "This is what we will not use the information for, check here."

Senator BENNETT. If we get back to Ms. Schlafly's point—if this information is owned by the customer—and I agree with you, it is owned by the individual—the individual ought to have a more informed opportunity to determine how it is being used.

In other words, if you take the position, okay, the government should not use it willy-nilly for whatever the government wants, by

the same token, the government should not forbid its use, willy-nilly, for something that the customer may want.

That is the balance, I think, that we are trying to strike here, in terms of the concept. And I agree. I think you have summarized the principle very well. Information is owned by the individual.

And there are, in today's cyberworld, advantages to the individual to have that information be more widely available than it might not otherwise be. And the individual ought to have an informed opportunity to take advantage of those advantages.

It is a very difficult kind of problem.

Senator SHELBY. Ms. Herman wants to comment first, and then Ms. Schlafly.

Ms. HERMAN. I think it is very important when we are talking about an informed decision making process to realize that there is a very narrow, narrowly defined decision of whether this corporation or that corporation gets your information.

And then there is, sort of, unintended secondary impact, I would say—the stalking that occurs, the identity theft that is growing as a crime in this country—that I do not believe that Americans today are fully informed about the extent of scope—of stalking, the extent of identity theft.

And so, it is hard, right now, at this point in history, to argue that you can have a fully informed decision about the possible consequences of this decision.

The information gets out too easily to too many people.

Senator BENNETT. In our hearing on identity theft, we found that the primary source of information is stealing mail, which is—I mean, people send out credit cards in as bland a manner as they possibly can. I often almost throw away the credit cards, because there is no return address, there is no indication of what it is. And you have to open it up.

And then I say, "Oh. Well, they did this in such a way so that if somebody saw this envelope they would not recognize that it was a credit card."

But there are people who go out and just simply steal large chunks of mail and go through them, hoping to find a bill or a credit card solicitation or something else that has a social security number, an address and a name on it, and then the identity theft begins. Yes. This is——

Ms. HERMAN. There are also people who are ordering that credit card for you, and then waiting until it is delivered to your home, and then picking through your garbage.

Senator BENNETT. Yes. That is part of the pattern.

Ms. Schlafly, you were——

Ms. SCHLAFLY. Yes. I guess we can agree it is the individual who owns his personal information and not the government or the commercial outfit that gathers it, but I think we need to make a difference between the databases that are government-owned—government-collected and the private industry.

Now, I am quite willing to let the free market cope with how these databases are handled in commercial affairs. ACLU sells their members database. Eagle Forum does not sell our database. That is personal organization choice.

And I like all of those mail order catalogs. I buy mail order. And the stack I got before last Christmas was 6 feet high. I kind of like them. That is the way I do my shopping. And I know they are trading them. That does not bother me.

I think when it comes to what government is doing, that we are really very concerned. There are just a lot of things that have happened in the last few years that have caused Americans to distrust government.

There have been mistakes in law enforcement. There have been mistakes in FBI files. And there have been mistakes in gathering information. And it is such power in the hands of government, that we just do not think this—they ought to be able to use it any way they want.

And now, with technology moving so rapidly, so that they can all be exchanged. For example, we are worried that the vaccine registries and the effort of the CDC to merge the state registries of vaccines is going to give the government a control of all of our medical records and enable the government to deny access to day care, kindergarten, school, college, even emergency rooms in hospitals, unless you have had the vaccines that the government has decided you ought to have.

Now, this is government power that we are worried about. And then, of course, Eagle Forum, for 20 years, has monitored the gathering of private information by the public schools. This is another proof that the opt-out does not work, because you put these nosey questionnaires in front of the children in school, and children are supposed to do what the teacher tells them, and they gather all of this information. Years ago, it went in a manilla file. Now, it goes on the computer database.

And it is power that we do not know how it is going to be used when it is in the hands of government. And we are concerned.

Senator BENNETT. Sir?

Mr. MIERZWINSKI. Very briefly, Senator Bennett, on the issue of identity theft, our organization has conducted a lot of research and published several reports. We obviously supported the criminalization legislation, but we believe that the big problem gets back to the fair information practices, again.

And that is, as you alluded in the—in the theft of mail, that companies do not have adequate fair information practices when it comes to protecting the accuracy and security of their databases.

So, the thief applies for credit. The thief only knows part of my personal information and applies from his address. The companies do a terribly sloppy job of determining whether or not that new address is, in fact, an exact address. They do not match credit report to the credit application adequately enough.

So, really, we think that a large part of the solution is to—is to not just go after the criminals, which I think is, to some extent, after the horse has left the barn, but to try to close the door of the barn better, by requiring companies to protect information better than they do—no more instant credit, better address change verification, and better matching of information.

And that is just an example of one of the additional fair information practices that these firms do not comply with.

Senator BENNETT. Interestingly enough—and I am sorry, Mr. Chairman, but what step back. What you are really asking for is more use of data to solve the problem of improper use of date.

Mr. MIERZWINSKI. Well, no. I am not more use, but better use. The companies just have sloppy databases. They have got mixed up credit reports, mixed up credit applications. They are not——

Senator BENNETT. To clean up—to clean up their databases. They would like to have more access to more information. It is part of the dilemma that we face.

Mr. MIERZWINSKI. We would disagree that they would need more information about consumers to do that. We would simply think that they need to have better practices when they grant credit.

Senator BENNETT. Thank you, Mr. Chairman.

Senator SHELBY. Thank you, Senator Bennett.

This past January, the Pennsylvania Department of Transportation canceled its contract with Choice Point Services, Inc., a private personal data clearinghouse, because the data firm made driver's license records accessible by way of the Internet, despite being specifically prohibited by state contract.

Personal information about Pennsylvania drivers somehow became available to Data Land, an Internet site that advertised and sold background information on people for $69.95 to anyone willing to pay.

It seems to me that this does not inspire confidence that these data providers are good stewards of the personal information that the information collects. In other words, once they get it, it is gone.

Ms. Schlafly, is that what fuels people's mistrust of government?

Ms. SCHLAFLY. Well, it is just another—another example to add to various items that have caused our distrust.

While I—I want to add one more comment to what I said earlier. While I think the free market can and should deal with the commercial collections of information, we do not want—we do not want any law that gives these commercial outfits a copyright or an ownership in these collections of information that is accompanied by criminal penalties. And there has been legislation cooking around in Congress on that area.

I feel that the free market can deal with it, but we do not want them running to the local District Attorney to prosecute anybody who wants to get her own medical records out of a government or—or AMA database.

Senator SHELBY. Well, you should have that right anyway. Should you not?

Ms. SCHLAFLY. Should have that right, because the information should belong to the individual.

Mr. MIERZWINSKI. Senator, I think——

Senator SHELBY. If Congress passes my bill, you will have that right.

Mr. MIERZWINSKI. Senator, I think that the example you gave from Pennsylvania—there are other examples very similar to that. Some of the states have entered into contracts with private firms that want to sell wage and unemployment data, ostensibly, to make credit applications easier.

And in audits of some of those firms, I believe the Department of Labor has found that their data protection practices have not

been adequate. And it just goes to show you that putting public records up for sale imposes grave privacy risks.

Senator SHELBY. Okay. I want to thank all of you in the first panel. We appreciate your participation. We appreciate your insight into this issue. And we will keep working this issue. Thank you so much.

Ms. SCHLAFLY. Thank you, Mr. Chairman.

Ms. HERMAN. Thank you.

STATEMENT OF LARRY MAJERUS, VICE PRESIDENT OF GOVERNMENT RELATIONS, POLK COMPANY

Senator SHELBY. On the second panel, we will hear from Mr. Larry Majerus from the Polk Company; Mr. Roger Cross, the Administrator of the Wisconsin Division of Motor Vehicles; and from Ms. Anne Ferro, the Administrator of the Maryland Motor Vehicle Administration.

If you folks would come up to the table. Your written statements will be made part of the record in their entirety.

Mr. Majerus. Is that right?

Mr. MAJERUS. That is correct.

Senator SHELBY. You proceed, as you wish.

Mr. MAJERUS. Thank you very much. Mr. Chairman, I very much appreciate you inviting me to appear before you today. My name is Larry Majerus. I am Vice President of Government Relations for The Polk Company in Southfield, Michigan.

Polk has a long strong commitment on privacy. And we commend your interest and leadership on privacy. And we share your view that an opt-in is an appropriate approach for sensitive information, such as photos and medical data.

At Polk, we obtain motor vehicle title and registration information, which we use for several purposes, including publishing statistics on the sale and use of automobiles, safety recall, product and performance surveys, and marketing.

Prior to coming to Polk, I was Director of Motor Vehicles for the State of Montana. In both positions, I have developed considerable experience dealing with the appropriate uses of motor vehicle information, balanced with citizens' concerns about privacy.

Polk has helped the automotive industry develop careful practices involving the use of public records. And we have assisted many motor vehicle departments in developing and implementing opt-out systems for marketing use.

I would like to make three points today. First, the opt-out systems that were in place were working to effectively protect privacy. Many States will be unable to convert to an effective opt-in system by June 1, causing them to shut down access for marketing and surveys—effectively, a prohibition.

Second, the principal use of motor vehicle records are manufacturers and dealers who have used this public information since 1922. They would be seriously impacted by the express consent provision.

And third, we believe opt-out versus opt-in needs a more thorough study before such action is taken. We urge the bill's implementation date to be delayed, to allow for a such a study of Section 350, paragraph D, of the Transportation Appropriations bill, and to

provide adequate time for States to comply with the new requirements.

We have heard that success of an opt-in and an opt-out program is going to be based on the communication to the consumer. So, we feel that is very important.

The auto industry deals almost exclusively with vehicle registration and titles, which only contain owner name, address, make and year of car or truck. Provisions were made in DPPA for many appropriate uses of public vehicle records.

It was accompanied by an option for consumers who might object to receiving mail advertising or surveys to request to have their name and address withheld for those purposes.

Polk helped seven States develop opt-out systems, even before Congress first introduced the Driver's Privacy Protection Act. Thirty-one States are now operative. Today, citizens in these states are told that they may have their motor vehicle records withheld for surveys, marketing, solicitation, and those concerned are doing so.

These States have descriptive opt-out language, visible on the application or renewal package, allowing the owner to opt-out or make a choice. Citizens are opting out at double digit levels, which we believe indicates the opt-out systems are working as they were intended.

Many States will have to scrap their existing opt-out systems, prepare notifications, and build new opt-in systems. We anticipate some States will shut down this important resource under these circumstances.

Without a delay, auto manufacturers and thousands of dealers will no longer be able to reach finite markets for their products. We are talking about marketing a sophisticated expensive product to a narrow market of potential customers.

And what of the many small businesses that have been created in the automotive industry and depend on make and year model information for their survival; like the producer of a special accessory for specific cars and trucks? They, like the auto dealers, need to reach specific vehicle owners with special offers.

The new language seriously damages the auto industry, which really has no effective alternative source for motor vehicle ownership information. Without that specific vehicle ownership information, they have to do more data mining; they have to do more modeling; they have to do more consumption of consumer data.

Finally, DPPA implementation was completed over a 3-year period, ending in September 1997. That timeframe was needed to achieve the objectives. By contrast, the current law passed as part of the final Appropriations bill in October 1999, States were given only until June 1 to dismantle their existing system and develop a whole new system. And we wonder how much confusion that is going to create among the consumers.

In closing, a quick opt-out—excuse me—a quick opt-in for motor vehicle records will effectively be a shut-off. It will definitely impact the auto industry; an industry that has depended upon and carefully used this public information for over 70 years.

PREPARED STATEMENT

We urge you to consider a delay in the implementation to give all parties a fair and reasonable time to discuss the objectives, reach acceptable conclusions, and provide adequate time for the States to comply.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF LARRY G. MAJERUS

Mr. Chairman, I very much appreciate your inviting me to appear before you today. My name is Larry Majerus and I am Vice President of Government Relations for The Polk Company in Southfield, Michigan. We gather motor vehicle title and registration information, which is then used for several purposes including publishing statistics on the sale and use of automobiles, safety recall, product and performance surveys, and marketing. Prior to my 12 years at Polk, I was Director of Motor Vehicles for the State of Montana for 11 years. In both positions, I have developed considerable experience dealing with appropriate uses of motor vehicle information balanced with citizens' concerns about privacy. My staff and I have helped the automotive industry develop careful practices involving the use of these public records, and we have assisted many state motor vehicle departments in developing and implementing opt out systems for marketing uses. My experience allows me to view this subject as a consumer, a retailer, a government official, and a businessman.

I would like to make four major points today—all facts that suggest that last year's appropriations bill amendment to the Driver's Privacy Protection Act ("DPPA") requiring "express consent" from consumers for surveys, marketing and solicitations is an unnecessary restriction on public records, and will greatly damage many businesses, especially those in the automotive industry. The four points I hope you will consider are first, the opt out systems that were already in place were working to effectively protect privacy. Many states will be unable to convert to an effective opt in system by the June 1st date, causing them to shut down access for marketing and surveys. Therefore, this abrupt opt in system is effectively a prohibition. Second, the principal users of motor vehicle records are manufacturers and dealers who have used this public information since 1922. They would be seriously impacted by the "express consent" provision. Third, the economic growth of this country may well be impacted by this new limitation. And fourth, we believe this bill needs a more thorough study before such drastic action is taken. We urge the bill's implementation date be delayed to allow for such discussions, and to provide adequate time for states to comply with the new requirements.

Most of the motor vehicle record information under discussion has been open record for so long that many do not consider it "personal." For example, the auto industry deals almost exclusively with vehicle registrations and titles, which contain only owner name and address and make and year of car or truck. Until now, users of motor vehicle records and the state agencies releasing them have been guided by the 1994 DPPA. That legislation was carefully considered so as to provide consumer privacy protections (and even avoidance of unwanted mailed advertising)—balanced with the needs of the nation's businesses for access to these open public records. Provision was made in the DPPA for many appropriate uses of public motor vehicle records including safety recall, fraud detection, statistics, motor vehicle research, and marketing. More importantly to our discussions today, inclusion of marketing, surveys and solicitations was accompanied by an option for consumers who might object to receiving mailed advertising or survey requests to have their names and addresses withheld for those purposes. "Clear and conspicuous" notice is provided and the consumer can opt out.

We have had such a system within our own company for many years, and we helped seven states develop opt out systems even before Congress first introduced the Driver's Privacy Protection Act. We believe DPPA was a good balance of the principles. Accordingly, states set about, with industry help, to develop opt out systems. Thirty-one states are now operative. Today, citizens in these states are told that they may have their motor vehicle records withheld from "surveys, marketing, or solicitations," and those concerned are doing so. These states have very descriptive opt out language, clearly visible in the application or renewal package, making it easy for the owner to opt out and detailing what will happen as a result of that choice. States flag the record information we receive so that those owner names may be used for safety recall, for example, but not for "surveys, marketing and solicita-

tions." Citizens are opting out at double-digit levels, which we believe, and the states confirm, indicates that the opt out systems are working as they were intended.

Many people, however, choose not to opt out. As the advertising industry knows, people are informed, educated, and motivated by advertising but they do not usually seek it out. The 1999 USPS Household Survey finds that only 4.9 percent of U.S. households object to advertising mail. And Simons Market Research finds that in the latest reported year, 68 percent of all adults in the U.S. bought something through direct marketing.

The mechanics of advising consumers, and providing an opportunity for them to opt in, are mind-boggling, especially in the short time allowed by this new legislation. For example many states will have to scrap existing opt out systems, prepare notifications, and build new (and probably expensive) opt in systems. We anticipate that the states will have little choice but to shut down this important resource under these circumstances. A delayed effective date will give states time to evaluate whether and how an opt in system can be effectively implemented.

Without a delay, auto manufacturers and thousands of dealers will no longer be able to reach finite markets for their products, which is our second point. This is not selling soap or candy, which everyone might use, but rather we are talking about marketing a sophisticated and comparatively expensive product to a narrow market of existing and potential customers. That marketing is vitally important to the auto industry. Not everyone is a prospect for a new car, as is demonstrated by the fact that 15 million car sales in a given year are made to over 100 million households.

And what of the many small businesses that have been created recently in the automobile industry and depend on make and year model information for their survival, like the producer of special accessories for specific cars and trucks? They will suffer as will any auto-oriented business, like a car dealership, that needs to reach specific groups of owners with special offers.

For those who use motor vehicle records for marketing, the need is very great. Without this information, manufacturers will have difficulty reaching their own owners. Yes, they start with a name and address from the sales record, but people move and sell their cars. Registration and title data is necessary to keep that information current and provide for important communications between seller and customer. It does so merely using name and address, and the make and year of car.

Our third point concerns the impact on our economy. The new language seriously damages the auto industry which has no alternative source for motor vehicle ownership information. That should be a concern, because the latest data available indicates that auto industry sales approximate $650 billion each year and represent 25 percent of all retail sales. State taxes on motor vehicles amount to some $41 billion each year, representing 11 percent of all taxes collected by states and that does not include sales tax on cars and trucks.

Surely an industry so important to the nation's economy should not be impeded in following the marketing and survey practices it has so successfully used without problem for many years.

That is especially true when you consider that the auto industry, and its data providers like Polk, have used this information very responsibly since the first compilations in 1922. It is principally for these automotive clients that we purchase this public data from the states and take such great care to insure that we use it responsibly.

Finally, one of the reasons this legislation can hurt so many businesses and people is because it passed quickly, and allows extremely limited implementation time. When the Driver's Privacy Protection Act was developed, discussions by staff with the private sector began more than a year before the bill's passage. Over time, several versions of the bill were prepared to provide for many legitimate uses, avoiding unnecessary impact on business, and still offering citizens an easy way to withhold their names. Planning for this significant legislation—into which everyone had input—started in July, 1993 followed by a year of hearings and discussions until passage in the fall of 1994. Implementation was to be complete three years later in September, 1997. That total four year time frame was needed to delicately but decisively achieve the objectives. It is especially important to note that states were allowed a full three years—from 1994 to 1997—to pass legislation, build their systems, and notify owners of the impending change. I can assure you from personal knowledge that this was not too much time.

By contrast, the current plan was introduced last May and passed as Section 350 paragraph d) of the final appropriations bill in October, 1999. DPPA took 50 months to enact and implement but as a result of these major revisions, states are given only until June 1, 2000 to dismantle their existing systems and develop new ones.

We believe that nothing of this magnitude and of such importance to so many should become law so quickly without full investigation of the unintended consequences and adequate time to implement the requirements.

In closing, the facts are clear. A quick opt in for motor vehicle records will effectively be a shut off. It will definitely impact the automotive industry, an industry that has depended upon and carefully used this public information for over 70 years. If the auto industry is hampered, the repercussions may be felt in the nation's economy, considering the value of automotive sales and associated taxes. And until now, at this hearing, none of us has had an opportunity to air the many sides of this issue, nor is ample time being allowed for states to implement the results. We urge you to consider a delay in the implementation date to give all parties a fair and reasonable time to discuss the objectives, reach acceptable conclusions, and provide adequate time for states to comply.

THE POLK COMPANY,
April 10, 2000.

Hon. RICHARD C. SHELBY,
Chairman, Subcommittee on Transportation and Related Agencies, Committee on Appropriations,
Washington, DC.

DEAR MR. CHAIRMAN: I would like to thank you for the opportunity to testify before the Subcommittee on Transportation and Related Agencies on April 4th regarding amendments to the Driver's Privacy Protection Act ("DPPA"). I am submitting this letter for the record in order to respond to two clusters of issues raised during the hearing.

Issue Cluster 1:

It was asserted during the hearing that all of the personal information contained in motor vehicle title and registration records and drivers' license records is sensitive and that the source of this personal information (i.e., the government) should be the primary determinant of the level of privacy protections that should be afforded to the information.

Issue Cluster 2:

It was asserted that opt-out systems are designed to fail and have consistently resulted in a failure to provide adequate privacy protections.

Response 1:

It was suggested during the hearing that all of the information contained in motor vehicle title and registration records and drivers' license records is very sensitive, and that this fact, coupled with this governmental source of this personally identifiable information, determines the level of privacy protections that should be afforded to the information.

In fact, just the opposite is true. Mostly, the information is traditionally public domain-type information—i.e., name and address information.

The Fourth Circuit most closely scrutinized the sensitivity of the information in "motor vehicle records" in a portion of their decision in *Condon* v. *Reno*, 155 F.3d 453 (4th Cir. 1998), that was left undisturbed by the U.S. Supreme Court. After analysis and discussion, they concluded: "In sum, the information found in motor vehicle records is not the sort of information to which individuals have a reasonable expectation of privacy." Id. at 465. Consequently, while, as the U.S. Supreme Court held in *Reno* v. *Condon* that Congress may chose to regulate the information found in motor vehicle records as "an article of commerce," it is not the type of information to which individuals have a reasonable expectation of privacy.

On the issue of the factors that have traditionally been considered in determining the level of privacy protections that should be afforded to personal information, it is the subject matter (i.e., sensitivity) and the use that is to be made of the information that customarily determines the type of privacy protections that should apply. That is why so many federal and state privacy laws permit some unrestricted uses of personal information but subject other uses to substantial regulation. The consumer reporting laws, for example, protect consumers from uses of personal information, even if obtained from public court records, when the use determines that person's eligibility for a job, or household credit or insurance.

Deciding whether or not to market a product or service to an individual has not been deemed to be a sufficiently important decision to merit substantial privacy protections. Federal privacy laws, for example, enacted after hearings and careful study, have repeatedly found that notice and opt-out suffices to allow consumers to

avoid marketing uses of their personal information. See, e.g., 18 U.S.C. 2710(b)(2)(D) (Video Privacy Protection Act), 47 U.S.C. 551(c)(2)(C) (cable TV subscriber privacy). The Safe Harbor Principles also recognize that data used in direct marketing is "not used for decisions that will significantly affect the individual."

Response 2:

Opt-out systems under the DPPA can provide adequate privacy protections.

Appropriately constructed and implemented opt-out systems have consistently been judged to provide strong privacy protections. Opt-out systems implemented under the DPPA have been successful in those states that have—

—1. Provided a clear, detailed and conspicuous notice;

—2. Devised a simple method by which consumers can exercise their opt-out rights;

—3. Made the consumer's choice permanent, that is, until the consumer changes his/her mind; and

—4. Reached all relevant data processors.

A robust notice explains the types of information that are being collected, how the information will be used, to whom the information may be disclosed, the purposes for which the information may be disclosed, and the consumers' rights with respect to the information.

In those states that have developed clear, detailed and conspicuous notices and effective, consumer-friendly mechanisms to implement opt-outs, consumers understand their rights and are able to exercise their right to choose. In these states, opt-out rates can exceed 30 percent. These kinds of opt-out rates reflect consumer choices which balance privacy interests with an interest in allowing their information to be used for various DPPA purposes, including marketing and surveys. Many consumers benefit from these marketing efforts and choose to receive marketing materials to make purchases of many useful products, including automobile safety-enhancing and fuel efficiency products.

Respectfully submitted,

LARRY G. MAJERUS,
Vice President, Government Relations.

STATEMENT OF ANNE FERRO, ADMINISTRATOR, MARYLAND MOTOR VEHICLE ADMINISTRATION

Senator SHELBY. Ms. Ferro.

Ms. FERRO. Thank you, Mr. Chairman, Senator Bennett. We appreciate—I do appreciate the opportunity to testify today.

I am Anne Ferro, the Administrator for Maryland.

Maryland is a bit different than some of the other States, and certainly, the AAMVA position you will hear today about the other States. Maryland has moved ahead with both an opt-out and an opt-in. So, perhaps, we are a good example of what can be accomplished, depending on which way leadership is going.

You will hear from AAMVA, and while Maryland is a very active member and supporter of AAMVA activities, on this issue, in particular, I would have to make sure you understand that our perspective is different.

A snapshot of Maryland. Maryland is a State of 3.5 million active drivers and 4 million active vehicle records. So, while relatively small in the scheme of 200 million driving records nationwide, we certainly have a sizable database to work with in moving ahead with a privacy provision.

Following the Federal enactment of a Privacy Act, Maryland leadership, both the General Assembly and the Governor, were successful in enacting a Maryland law, specifically requiring an opt-out system. That was enacted in April 1997. And we had to have it, of course, in compliance with the Federal Act by September 1997, and then, for Maryland's purposes, the extra pieces by October 1997. So, we moved rather quickly.

Implementation of that Act was somewhat expensive because of the time frame. It was about a $1.5 million. But it certainly was doable within the context of the constraints that we had.

Now, Maryland's 1997 Privacy Act mirrored the Federal Privacy Act, insofar as we offered an opt-in—an opt-out approach—excuse me—but our record access remained open to law enforcement, Federal and State government, courts, insurance industry, private investigators, and the towing industry, and other specific emergency purposes. So, our regulations reflected that.

Now, in our testimony—you have a copy—the last two pages, the second to last page is a copy of the form that Maryland made available to the public. And the reason I brought it is, it is indicative of something that has already been reflected by your prior panel and yourself, Mr. Chairman. An opt-out system is confusing to the public.

Maryland's law, since 1943, has mandated an open record system. So, in fact, Maryland vehicle law made records open to the public from 1943 forward. When the Maryland General Assembly moved ahead with enacting an opt-out system that, for the first time ever, allowed Maryland citizens to close access to their records, the public went wild. They thought that, for the first time, Maryland was offering for sale, over-the-counter, their record. It had just not been an issue before.

Even at the Federal level, the attention had not been paid to the Federal Act. But the Maryland public, with the assistance of the Worldwide Web, perceived that, in fact, for the first time ever, Maryland was offering the sale of your vehicle record over-the-counter by picking up a tag of someone, as your mentioned, Senator Bennett, who was attractive, who happened to drive by.

That confusion, combined with the marketing industry's concerns—which again, the attempt in the 1997 Act was to balance the concerns between privacy, public safety and the very valid interests of commercial industry and the availability of mailing lists. That balance was proven to be somewhat skewed in actual implementation of an opt-out system.

What the commercial industry found was that Maryland's $3.5 million—3.5 million-record driver database was no longer reflective of Maryland, because by virtue of an opt-out system, about 1 million of our citizens opted to close public access to their records—about a third.

Senator SHELBY. From everyone? Did everybody respond to——

Ms. FERRO. No, they did not.

Senator SHELBY. Okay.

Ms. FERRO. And that is a very good question to raise.

Maryland renews about 20 percent of its drivers every year. We have had the opt-out system on the books now for a little over 2 years. Everybody, at the time of renewal of their driver's license, as well as their vehicle, is offered the opportunity, verbally, "Would you like to close public access to your record?"

We also issued numerous press releases, and there was a great deal of coverage to the public, announcing, in September and October 1997 through the fall, that you, in fact, could call a toll-free number, 24 hours a day, 7 days a week, and yourself close access

to your records, so you did not have to wait for renewal, or you could submit this form.

Senator SHELBY. Would it not be easier Ms. Ferro for everybody, if the prohibition be that you could not sell their driver's license or use their information unless they opt-in?

Ms. FERRO. And that is, in fact, what we moved to.

Senator SHELBY. Okay.

Ms. FERRO. By virtue of that confusion that occurred——

Senator SHELBY. Because the other would confuse you.

Ms. FERRO. We went from opt-out to opt-in.

Senator SHELBY. Okay.

Ms. FERRO. And part of it was by virtue of that public outcry. And what we found was, while over two-and-a-half years, more than 45 percent of our recordholders really were literally asked the question over-the-counter, "Would you like to privatize your record?" in addition to being bombarded with forms that had the information on it, with access through the press releases and newspaper coverage, information on our web site that you could privatize your record any time you wanted—even with all of that availability of information, only 31 percent of our drivers actually privatized their records.

It defied what you would have expected. And I think it speaks right to Ms. Herman's point—people do not know when they need to be protected.

We offered it over-the-counter. Of course, we asked a lot of questions, "Would you like to register to vote? Would you like to be an organ donor?" But most importantly, this privacy question, a lot of people said, "Don't care," because they probably did not realize how important it was until something may have happened, as Ms. Herman pointed out.

So, in light of that confusion, Maryland's General Assembly did, in fact, in January—or the 1999 session, I should say, enacted, by April, an opt-in provision. And that will take effect July of this year.

Because Maryland already implemented much of the programming that was required under the opt-out provision, we have really made our major expense back in 1997. So, the move to the opt-in system is very simple. It is about a quarter of a million dollars, a lot of training to our employees, but our slogan to them is, "When in doubt, don't give it out."

So, we have been able to move ahead. And I just wanted to reinforce, I think, some of the——

Senator SHELBY. Can we use that slogan?

Ms. FERRO. Yes, you may. Please. Nothing we do is copyrighted.

Senator SHELBY. Thank you.

Ms. FERRO. It is yours. We would be honored.

PREPARED STATEMENT

So, in fact, I just wanted to speak from our own experience in Maryland. It is doable. We are relieved, in fact, and I see my light, to go to an opt-in system, and feel that that will offer more protection to our citizens.

Senator SHELBY. For the people.

Ms. FERRO. Yes.

[The statement follows:]

PREPARED STATEMENT OF ANNE S. FERRO

Mr. Chairman and Members of the Committee. I thank you for the opportunity to come before you today. I am Anne S. Ferro, Administrator of the Maryland Motor Vehicle Administration. I have been asked today to detail Maryland's efforts to make motor vehicle records private.

The Maryland Motor Vehicle Administration's (MVA) primary customers and business partners are the public, industry, employees and other government agencies. The MVA interacts directly with most of Maryland's residents, conducting approximately 7.5 million walk-in customer transactions annually and 10 million total transactions overall. The MVA's products include over 3.7 million vehicle registrations, 3.4 million driver licenses and identification cards, and 2.5 million emission tests.

The MVA collects almost $900 million in revenue per year that is deposited into the state's Transportation Trust Fund. This revenue represents an average of 30 percent of the total Transportation Trust Fund and is redistributed to all modes within the Maryland Department of Transportation to fund major transportation initiatives and operating costs. Funds are also distributed to the state's General Fund and local governments. MVA's current operating budget is $114.4 million.

MARYLAND'S 1997 PRIVACY INITIATIVE

Maryland driver and vehicle records maintained by the Motor Vehicle Administration (MVA) have been open to public access through the authority of the 2 State Motor Vehicle Act of 1943. The Federal Driver Privacy Protection Act of 1994 specifies that, beginning September 1, 1997, state motor vehicle agencies must offer record holders the opportunity to close their records to public use. Maryland implemented strong state initiatives in 1997 and 1999. The 1997 initiative (Chapter 338 of the Laws of 1997) allows Maryland citizens the opportunity to block access to their records for use in commercial mailings and to the public. (See Attachment I). This legislative initiative was the result of three years of deliberations and has resulted in 31 percent of Maryland drivers requesting that their records be privatized.

Under the current privacy law, citizens have options on whether their records are closed to individuals and whether they consent to having their addresses sold for merchandizing promotions. As of, March 26, 2000, the options taken by Maryland citizens were:

MVA Records Blocked Under 1997 Act

Block public access and mail list purchases	1,038,518
Block public access; allow mail list purchases	12,360
Allow public access, block mail list purchases	1,398

MARYLAND'S 1999 PRIVACY INITIATIVE

One unintended result of the 1997 legislation was the public confusion and perception that the General Assembly had opened all motor vehicle records to allow for their sale to marketers. The resulting legislative response was to fully close motor vehicle records through legislation enacted in 1999. Chapters 349 and 350 of the Laws of 1999 become effective July 2000. (A copy of this law has been provided to the committee staff) They prohibit disclosure of MVA records, unless the individual specifically consents to the disclosure in writing. (See Attachment II) Personal information covered by this statute includes: address, driver's license number, medical information, name, photograph, Social Security Number, or telephone number.

Briefly, Maryland law governing privacy authorizes the following:

—Closes all MVA records to the public and to mail list purchases, beginning July 2000. Only when a record holder opts for a file to remain open is it accessible to the public.

—Restricts access to personal information from Motor vehicle records except for certain permissible uses.

—Requires each entity accessing MVA records to retain a record for 5 years of the use and re-disclosure of the records. Any access to MVA records is subject to monitoring and audit by the MVA.

—Prohibits use of MVA records for telephone solicitations.

—Requires the MVA to establish regulations governing waivers of privacy.

—Allows access to the following users, consistent with federal law:

  —Applicants who provide written consent from the record holder.

—Employer or Insurer for holder of a Commercial Drivers' (CDL) License to obtain/verify information required under law.
—Government Agency (Federal, State and Local).
—Individual or his/her attorney. Insurer/Insurance Support Agency in connection with rating, Underwriting claims.
—Law Enforcement/courts.
—Legitimate business entity to verify personal information already provided to recover debt, and purse legal remedies against the individual.
—Licensed Private Detective Agency or Security Guard Agency for purposes permitted by law.
—Motor Vehicle Driver Safety, Vehicle Theft, Vehicle Emissions, Alterations or Recalls.
—Private Toll Facility operations.
—For use in connection with court proceedings for process service investigation in anticipation of litigation and execution/enforcement of judgements and orders.
—Research/Statistical for purposes approved by MVA.
—Towing Company or Impound Facility.
—Operator of a taxicab, limousine, funeral vehicles for matters relating to public safety or emergency treatment for a member of the public.

FISCAL IMPACT OF MARYLAND PRIVACY ACT

The MVA currently sells certified and non-certified records for fees of $10 and $5, respectfully. Additionally, the MVA sells groups of records for a minimum fee of $500, and $.05 for each record over 10,000.

REVENUE SALE OF MVA RECORDS

[In millions of dollars]

	1997	1998	1999
Individual record purchases	$12.9	$13.6	$14.0
Direct mail purchases	.7	.9	.9

Individuals or entities that would still have authorized access under the exceptions provided for in the Maryland law purchase the majority of certified and non-certified records. However, the bill prohibits the sale of groups of records that are sold to marketers, surveyors and solicitors, unless the expressed written consent of the person in interest is received by the MVA.

It is expected that a few individuals will give consent to avail their driving and registration records for public inspection. As a result, the MVA estimates a $.9m decrease in Transportation Trust Fund revenues beginning in fiscal year 2001. The cost of implementing the changes is an estimated $235,000 in fiscal year 2001 necessary for computer programming and for replacing forms inventory to notify drivers and vehicle operators of the new privacy requirement. Therefore, the total fiscal impact of this initiative is over $1.1 million loss to the Administration and the Trust Fund.

The MVA continues to work to guarantee full privacy of the records of Maryland citizens. We have the full support of Governor Glendening and the General Assembly. MVA has notified commercial business that the public records will no longer be available. MVA staff are being trained on major legislative changes; and all programming changes are scheduled to be in place by July 1, 2000.

Thank you for requesting Maryland's perspective on the matter of privatizing access to motor vehicle records. I would be pleased to answer any questions at this time.

ATTACHMENTS

(I) Current form for citizens to request their motor vehicle and driver's license file be closed

(II) Draft form to accommodate July 2000 law changes allowing citizens to request that their motor vehicle and driver's license files remain open.

ATTACHMENT I

Maryland Department of Transportation
MOTOR VEHICLE ADMINISTRATION
6601 RITCHIE HIGHWAY, N.E.
GLEN BURNIE, MARYLAND 21062

MARYLAND
RECORD RESTRICTION NOTICE

NAME (PLEASE PRINT)

M	M	D	D	Y	Y

DATE OF BIRTH

DRIVER LICENSE NUMBER

A. ☐ I do not want my driver record or motor vehicle records released to individuals who are not authorized by law to receive them.

B. ☐ I do not want my driver record or motor vehicle records released to companies who mail offers and information on consumer products and services, conduct surveys, or solicit business.

C. ☐ Both A and B.

MARYLAND
RECORD RESTRICTION NOTICE

As a result of new federal and state privacy laws, the Motor Vehicle Administration (MVA) is offering residents an opportunity to keep their MVA driver and motor vehicle records private. If you choose to keep your records private, this information will be restricted to government officials, law enforcement personnel and those who need it in connection with motor vehicle or driver safety, theft, emissions and manufacturer recalls. If you do not choose to keep your records private, this information will be given out upon request.

If you would like to keep your MVA records private, please call the toll-free number 1-888-MVA-DPPA (1-888-682-3772) or complete the information on the reverse side and return it to any MVA office or mail it to: MVA, DPPA, 6601 Ritchie Highway, NE, Glen Burnie, MD 21062.

DL-026 (7-97)

ATTACHMENT II

Maryland Record Restriction Notice

Please see back of this form for additional information.

Section A

Name (please print) Date of Birth

Driver's License Number

Section B

1. ☐ I **want** my driver and motor vehicle records open to public access.

2. ☐ I **do not want** my driver record or motor vehicle records open to public access.

Signature (required) Date

*Completed form must contain your signature.

Motor Vehicle Administration
6601 Ritchie Highway, N.E.
Glen Burnie, Maryland 21062

For more information, please call: 1-800-638-8347 (touch tone calls only), 1-800-950-1MVA (1682) (to speak with a customer service representative), From Out-of-State: 1-301-729-4550, TDD for the hearing impaired: 1-800-492-4575.

DL-025 (3-00)

Maryland Record Restriction Notice

Effective July 1, 2000 federal and state privacy laws prohibit the disclosure, except in certain circumstances, of Motor Vehicle Administration (MVA) records containing personal information without written permission from the individual who is the subject of the record.

To make your MVA records **public**, complete **Sections A and B, #1** of this form. Return the completed form to a MVA office or mail to: **Motor Vehicle Administration, 6601 Ritchie Highway, N.E., Glen Burnie, Maryland 21062, Attn. Driver Records Unit.**

If you provided a written request to make your MVA records public after July 1, 2000 and now want the records **private**, complete **Sections A and B, #2** of this form. Return the completed form to a MVA office or mail to: **Motor Vehicle Administration, 6601 Ritchie Highway, N.E., Glen Burnie, Maryland 21062, Attn. Driver Records Unit.**

STATEMENT OF ROGER CROSS, ADMINISTRATOR, WISCONSIN DIVISION OF MOTOR VEHICLES

Senator SHELBY. Mr. Cross.

Mr. CROSS. Good morning, Mr. Chairman and Senator Bennett.

My name is Roger Cross. I am the Administrator for the Wisconsin Division of Motor Vehicles. And I am here representing the American Association of Motor Vehicle Administrators, AAMVA. It is a voluntary organization representing motor vehicle administrators and highway safety officials in the United States and Canada.

Our members are responsible for administering the laws for motor vehicle operation, and we maintain driver history records of over 200 million vehicle operators in the United States, alone.

We share the concerns of Congress and the public to protect the privacy of personal information gathered and maintained by State agencies. I am pleased the State of Maryland is also here participating.

The focus of my testimony, though, is to be on the issues identified by 45 States that have to comply with the amendments to the DPPA by June 1, 2000. South Carolina, Oklahoma, and my State of Wisconsin have accelerated implementation deadlines as a result of the Supreme Court decision.

Motor vehicle officials take seriously our role as administrators of a consumer agency, a highway and traffic safety agency, and as administrators of the leading State government agency for identity verification.

Because of this multifaceted accountability, we are continually balancing the legitimate needs to access records for safety purposes against unauthorized release of information that may infringe on an individual's personal safety.

That is why AAMVA played an active role in shaping the original language of the DPPA in 1994. At that time, there was not 100 percent agreement among the States that the DPPA would provide the level of privacy protection that it purported. Many States questioned its constitutionality. In fact, Wisconsin was one of those States.

The recent U.S. Supreme Court decision in Reno versus Condon has clarified States' questions about the constitutionality of the DPPA. However, the passage of Section 350 has raised a host of new concerns for the States.

I will use the remainder of my time to identify some of the concerns States have expressed in complying with the amendments.

With regard to the new category of "Sensitive Personal Information," the AAMVA community is very pleased that Congress has authorized access to law enforcement, insurance companies, employers, and the courts. The information disclosed for those purposes has a direct impact on public and highway safety.

Subsection 350(c) amends permissible use 11 and requires States to receive express consent of the person prior to the release of individual records for secondary use. This amendment eliminated the opt-out provision.

The term "express consent" is not clearly defined and may create a non-uniform interpretation at the State level. The term "opt-in" has a uniform meaning among State agencies and industry partners alike. Typically, an individual opts in, in writing. Express con-

sent may be interpreted by States to mean either in writing, verbally or electronically.

In light of the burden placed on States to receive express consent, clarification would help ensure that the State practices are uniform.

Subsection 350(d) amends permissible use 12 and requires States to receive the express consent of an individual prior to inclusion of their record for bulk distribution for surveys, marketing and solicitations.

A survey of AAMVA's membership reflects that members are working diligently to comply with the implementation deadline. However, some States have determined that the costs associated with establishing a statewide opt-in system for a small number of participants would not be the best use of limited financial resources. Therefore, many States will simply close their records for marketing purposes.

The AAMVA community also seeks clarification of Subsection 350(e). The intent of this language is not clear. In seeking clarification of this subsection, Congressional staff explained to the Association that the intent of the language is "not to burden the' individual' to give express consent as a condition of the receipt of a motor vehicle record."

The problem with that interpretation is that the language never references the "individual." The language only references "the issuance of a motor vehicle record."

Some States' Attorneys General have expressed concern that this language would prevent a State from charging an administrative fee for records. If the intent is not to coerce individuals into giving consent, then that needs to be clearer, and AAMVA recommends redrafting the language in Subsection 350(e).

In late February, AAMVA wrote Secretary Slater to request written interpretation of the language found in Subsection 350(f). Our concerns relate to the fact that the State administrators were unclear what actions the Department would undertake if a State is found to be in noncompliance. In addition, the language includes reference to "grantee," which is not used elsewhere.

The motor vehicle community is seeking clarification on whether the language is referencing receipt of safety grants, such as are available under Section 402 or 410 of DOT appropriations.

Finally, the Association seeks clarification on behalf of its members on permissible access to the press. Many States have allowed access to the press under permissible use 14 of the DPPA. We would appreciate clarification on this issue.

AAMVA has compiled information on States' implementation strategies to date. We have also submitted an additional list of concerns States have expressed that require further clarification. Guidance on these issues will help ensure that States implement the provisions consistent with the subcommittee's intent.

PREPARED STATEMENT

We look forward to working with the subcommittee and staff to resolve these issues. I thank you for the opportunity to testify today and will respond to questions.

[The statement follows:]

PREPARED STATEMENT OF ROGER D. CROSS

Good morning Mr. Chairman and members of the Subcommittee. My name is Roger Cross. I am the Administrator for the Wisconsin Division of Motor Vehicles and I'm here representing the American Association of Motor Vehicle Administrators (AAMVA).

AAMVA is a voluntary association representing the motor vehicle administrators and highway safety officials in the United States and Canada. Our members are responsible for administering the laws for motor vehicle operation, and they maintain the driver history records of more than 200 million vehicle operators in the United States alone.

I know I speak on behalf of my fellow administrators when I say that we share the concern of Congress and the public to protect the privacy of personal information gathered and maintained by state agencies.

I am pleased that two other member jurisdictions of AAMVA, the States of California and Maryland are also participating in this morning's hearing. They represent two distinct perspectives on access to driver and motor vehicle records.

The focus of my testimony is on issues identified by the forty-five (45) states that have to comply with the amendments by June 1, 2000. South Carolina, Oklahoma and my State of Wisconsin have accelerated implementation deadlines as a result of the Supreme Court decision.

Motor vehicle officials take very seriously our role as administrators of a consumer protection agency, a highway and traffic safety agency, and as administrators of the leading state government agency for identity verification.

Because of this multifaceted accountability, we are continually balancing the legitimate needs to access records for safety purposes against the unauthorized release of information that may infringe on an individual's personal safety.

That's why AAMVA played an active role in shaping the original language of the DPPA in 1994. At that time, there was not 100 percent agreement among the states that the DPPA would provide the level of privacy protection that it purported. Many states questioned its constitutionality. In fact, Wisconsin was one of those states.

The recent U.S. Supreme Court decision in *Reno* v. *Condon* has clarified states' questions about the constitutionality of the DPPA. However, the passage of Section 350 has raised a host of new concerns for the states.

I will use the remainder of my time to identify some of the concerns states have expressed in complying with the amendments.

With regard to the new category of "sensitive personal information," the AAMVA community is very pleased that Congress has authorized access to law enforcement, insurance companies, employers, and the courts. The information disclosed for those purposes has a direct impact on public and highway safety.

Subsection 350(c) amends permissible use 11 and requires states to receive the express consent of the person prior to the release of individual records for secondary use. This amendment eliminated the "opt-out" provision.

The term "express consent" is not clearly defined and may create non-uniform interpretation at the state level. The term "opt in" has a uniform meaning among state agencies and industry partners alike. Typically, an individual "opts in" in writing. Express consent may be interpreted by states to mean either in writing, verbally or electronically.

In light of the burden placed on states to receive express consent, clarification would help ensure that state practices are more uniform.

Subsection 350(d) amends permissible use 12 and requires states to receive the express consent of the individual prior to inclusion of their record for bulk distribution for surveys, marketing and solicitations.

A survey of the AAMVA membership reflects that members are working diligently to comply with the implementation deadline. However, some states have determined that the costs associated with establishing a state-wide opt-in system, for a small number of participants, would not be the best use of limited financial resources available to these agencies. Therefore, many states will simply close their records for marketing purposes.

The AAMVA community also seeks clarification of subsection 350(e). The intent of this language is not clear. In seeking clarification of this subsection, congressional staff explained to the Association that the intent of the language is "not to burden the 'individual' to give express consent as a condition of receipt of a motor vehicle record."

The problem with that interpretation is that the language never references the "individual." The language only references the "issuance of a motor vehicle record."

Some states' Attorneys General have expressed concern that this language would prevent the state from charging an administrative fee for records. If the intent is

not to "coerce" individuals into giving consent, then that needs to be clearer. AAMVA recommends redrafting the language in subsection 350(e).

In late February, AAMVA wrote Secretary Slater to request written interpretation of the language found in Subsection 350(f). Our concerns relate to the fact that state administrators are unclear what actions the Department will undertake if a state is found to be in noncompliance. In addition, the language includes a reference to "grantee," which is not used elsewhere.

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Finally, the Association seeks clarification on behalf of its members on permissible access to the press. Many states have allowed access to the press under permissible use 14 of the DPPA. We would appreciate clarification on this issue.

AAMVA has compiled information on states' implementation strategies to date. We have also submitted an additional list of concerns states have expressed that require further clarification. Guidance on these issues will help ensure that states implement the provisions consistent with the Subcommittee's intent.

We look forward to working with the Subcommittee and staff to resolve these issues. I thank you for the opportunity to testify today and will respond to questions at the appropriate time.

QUESTIONS REGARDING IMPACT OF SECTION 350 IN IMPLEMENTING AMENDMENTS TO DRIVER'S PRIVACY PROTECTION ACT

1. What is the impact on operation of National Motor Vehicle Title Information System (NMVTIS) or any other electronic system developed to exchange motor vehicle information through third-party providers?

2. What are private investigators allowed access to if request is not connected to an ongoing court case?

3. Does "motor vehicle record' as defined in H.R. 2084, section 350(a) include "all" motor vehicle records [which is how it is defined in the DPPA at section 2725(1)] or just the personal information contained within the motor vehicle records?

4. Are third parties acting on behalf of insurance companies still able to buy motor vehicle records in bulk if the information is used only for insurance purposes?

5. Will subsections (a) and (b) of Section 350 expire annually as they are tied to appropriations language?

6. If there is a missing signature to transfer title, can the jurisdictions rely on permissible use 14 to release personal information to the customer who is seeking to contact that person to obtain the required signature?

7. Are bulk sales permitted, without receiving express consent, for motor vehicle records (i.e., vehicle identification number, make, model) if no personal information is released?

8. Is it permissible to provide personal information from motor vehicle records to lawyers seeking clients to sue liable parties involved in accidents? These attorneys are called "ambulance chasers" and seek this information for business development purposes.

9. Is it permissible to disclose personal information to licensed security services that call the DMV to verify the owners of vehicles parked on their premises?

10. The walk-ins have caused a great deal of confusion for many jurisdictions. For instance, current practice is that if someone walks-in and supplies the DMV with the name, date of birth, and address of an individual, information will be provided to them without receiving "express consent" from the individual to whom the record applies. Is that practice permissible under the DPPA as amended?

STATUS OF JURISDICTIONAL IMPLEMENTATION OF DPPA AMENDMENTS ARISING AS A RESULT OF SECTION 350 OF P.L. 106-69

JURISIDICTION	STATUS
Alabama	Will resume the process to adopt as administrative regulation. Recommendation is that vehicle records be closed at this point, but they are still deciding whether to implement opt-in. Public Safety is also still deciding for driver records. They do not currently release records to individuals. They don't have opt-out—they don't sell for bulk distribution.
Alaska	Alaska has legislation introduced to mirror changes from Shelby amendments (House Bill 324 and Senate Bill 232, introduced 2/2/2000). Driver records are private and confidential so these changes won't affect it. Vehicle records: 3 companies get them, contracts will be revised to specify that they can only be released for permissible DPPA uses.
Arizona	Arizona has a short legislative session. They didn't do anything because waiting for clarification. If necessary they will comply administratively and draft legislation later, but they need clarification.
Arkansas	No regular session in 2000. Must comply by 2001.
California	California law is much stricter than DPPA; records are not released for marketing or solicitations. When an individual request is made, the subject is contacted and provided opportunity to restrict access.
Colorado	Senate Bill 11 pending in legislature. In Colorado, they have broadened law to make it stricter. They have proposed even stricter standards to include accident reports as something they won't release.
Connecticut	House Bill 5893, introduced March 8, 2000 would implement opt-in and add term express consent to bulk sales as well as to two other uses authorized under DPPA currently (permissible use #3). Connecticut already has an opt-in for individual look-ups. Also would allow distribution of photos for fraud prevention purposes, but only if express consent of the individual is obtained.
Delaware	Senate Bill 146 pending from 1999 would close records and provide for release only with express consent of individual.
District of Columbia	D.C. does not release records for marketing purposes. Vehicle and driver records are only released to casual requestors when accompanied by permission of the driver.
Florida	House Bill 1967 would implement opt-in system. Introduced 3/15/2000. Bill on committee agenda for April 3, 2000.
Georgia	GA law is much stricter than DPPA. They do not sell for bulk purchase, and casual requestors must have signed, notarized document authorizing access from the record holder.
Hawaii	Casual requestors cannot get personal information. Hawaii law specifies that the driver must give consent to release and can limit access to specific uses.
Idaho	Will implement opt-in. Governor approved Senate Bill 1435 and Senate Bill 1409 on March 22, 2000.

JURISDICTION	STATUS
Illinois	Driver records have been closed administratively. Undertaking comprehensive re-write to adopt legislatively, but already comply administratively. They have legislation in this session to restrict photos. Vehicle Records: Illinois has had no bulk sales for marketing for past 3 years. In Illinois, personal information is not released, unless allowed under permissible uses. When an individual request is made, there is a 10-day waiting period when the individual is alerted that someone has requested their record.
Indiana	Will implement opt-in. HB 1097 became Public Law 39-2000 on March 15, 2000. Never had opt-out for individual lookups because existing statute provided that information is released only for permissible uses under DPPA. Don't do bulk sales for marketing. Bulk sales permitted only for permissible uses. Have contracts with Polk, Experian, and Equifax for recalls, etc., but cannot be used for marketing.
Iowa	Will implement opt-in. Senate File 2313 pending before the Iowa legislature. All records private, unless someone wants to opt-in, which can be accomplished through a form.
Kansas	Kansas will do an opt-in by the deadline and comply administratively. Kansas law currently precludes use for marketing purposes. Disclosure of photos is also currently prohibited by statute, except for law enforcement.
Kentucky	Kentucky driver records are not released except for lawful purposes. Never implemented opt-out under DPPA. Casual requestors cannot get personal information, unless they have a release from the individual. Vehicle: changed so they can only sell for purposes outlined in the law. Bulk sales for marketing will no longer be permitted. Casual requestors cannot get records without written release from individual.
Louisiana	Louisiana has closed their records administratively. Unless they come under the other disclosures of DPPA, they won't be released. Someone can get a record if they have a signed release from the individual. Bulk sales are closed.
Maine	Maine had an opt-out but they will go to an opt-in system. They will keep exceptions from the DPPA. Intention is to completely institute through rulemaking. Intend to make it by the deadline. They will also do some publicity. Have separate state law prohibiting disclosure of photos. SSNs always confidential. Title 29A MRSA Sec.1401.
Maryland	Maryland will implement opt-in. Records were closed prior to passage of Shelby amendments.
Massachusetts	Massachusetts records are not sold for bulk purchase so they will not implement an opt-in.
Michigan	House Bills 5227, 5230, and 5270 pending. They would prohibit bulk sales. Michigan never instituted an opt-out, so there are no casual sales. Highly sensitive info: Michigan has highly restrictive information, which already includes photo, SSN, medical. They have had two classes of personal information for 3 years. There must be a state law authorizing access to the highly restricted information. Photos can never be released except for law enforcement. Courts can also issue a court order to get it. Statutes are separated, so that's why three bills are being pursued.

JURISIDICTIONS	STATUS
Minnesota	Minnesota legislature considering bill (Senate file 2992) to direct Commissioner to do whatever is necessary to comply with new requirements.
Mississippi	Vehicle: Don't think the changes will have an effect on them, since releases are compliant with DPPA as amended. Driver: They are not going to do opt-in, and will comply administratively. Unless you have a signed release, you won't be able to get a record. Closing bulk sales all together.
Missouri	Department has drafted language to coincide with federal legislation and is seeking a sponsor. In the midst of implementing administratively. They will define express consent as written consent from the person. Closing bulk sales all together. Senate Bill 538 (pre-filed 12/1/99), House Bill 1079 (introduced 1/5/2000), Senate Bill 565 (introduced 1/5/2000), and House Bill 2102 (introduced 3/6/2000) all pending. They propose to implement the opt-in in various forms. Department will pursue its own legislation.
Montana	No legislative session in 2000. Will comply in 2001.
Nebraska	Implemented opt-in. Creates new category of "sensitive personal information." LB 1317 signed into law by Governor on March 21, 2000. Effective June 1, 2000.
Nevada	No legislative session in 2000. Will comply in 2001.
New Hampshire	House Bill 1620 pending before Transportation Committee would implement opt-in for bulk sales. Goes further than Shelby amendments.
New Jersey	New Jersey is in compliance with Shelby amendments and does not need legislation. Individual records may be released with notarized written consent of the person whose record is being requested.
New Mexico	New Mexico cannot sell any part of its database for marketing or solicitation, or for contacting individuals. Only the individual or an employer can get individual records, as well as law enforcement.
New York	New York complies administratively. They have treated driver records as personal records all along. Have required every requestor to sign an agreement in order to get it stipulating what they will use it for. There is Assembly Bill A07413 pending—closes records to purposes 11 and 12 of DPPA, as amended by Shelby amendments. If nothing passes they still comply administratively.
North Carolina	North Carolina records are closed. Personal information contained in motor vehicle records at the North Carolina Division of Motor Vehicles was scheduled to be available to mass marketing companies beginning January 1, 2000. The North Carolina General Assembly enacted a law effective July 1, 1999 to prohibit release of personal information to mass marketing companies unless DMV has received prior permission from the citizen. All motor vehicle records maintained will remain closed to mass marketing companies unless a citizen would like that information to be released.
North Dakota	No legislative session in 2000. Will comply in 2001.
Ohio	Rulemaking under way currently to comply administratively.
Oklahoma	House Bill 2100 pending. Passed House, and referred in the Senate. Personal information is prohibited from being distributed under this legislation, except for law enforcement and among other state agencies and other DMVs. Attempting to create a form for individual request, as well as an authorization form for the covered entities under DPPA. May implement opt-in.

JURISDICTION	STATUS
Oregon	No legislative session in 2000. Will comply in 2001.
Pennsylvania	State statute is more stringent than DPPA. Records not distributed for marketing. Vehicle records are released only for recalls. Driver records released only for insurance Fair Credit Reporting Act, and employment purposes.
Rhode Island	Rhode Island does not sell bulk records for marketing. Will comply by June 1, 2000.
South Carolina	South Carolina will comply administratively. Records have been closed since Condon v. Reno.
South Dakota	They will close records except for authorized uses under DPPA, as amended. May restrict even further. Will hope to implement administratively by May 1.
Tennessee	They will close records administratively effective June 1, 2000. Right now, they have an opt-out. They will close records, and won't release for bulk or casual requestors unless someone completed an opt-in form to give them permission. Driver and vehicle records will both be under the same policy. Will propose legislative change in next session.
Texas	No legislative session in 2000. Will comply in 2001.
Utah	Utah Senate Bill 174 signed into law by Governor on 3/14/2000. Makes records of the Department private. Records may only be released in conformance with the DPPA as amended. Driver records not sold for marketing in bulk. Senate Bill 174 allows Utah to disseminate personal information from driver records only when it is determined to be in the interest of public safety, and according to the DPPA as amended. Information obtained may not be re-disclosed or used for advertising or solicitation purposes.
Vermont	In Vermont, individual lookups have and continue to require consent of the individual prior to release. Vermont does not release records for bulk sales for marketing. When a request for bulk information comes in, the Commissioner and AG's office review the request to ensure compliance with DPPA. Applies equally to driver and vehicle records.
Virginia	Virginia does not sell records in bulk for marketing purposes, and personal information is not released to casual requestors. VA Code Section 46.2-208 specifies when records may be released. Driver and vehicle information are considered to be privileged and subject to restricted release.
Washington	Washington did not adopt the opt-out provisions, and sensitive personal information is not disclosed, so they do not need to make any changes to comply.
West Virginia	They will implement administratively according to new Shelby requirements. Unless you opt-in, folks can't get anything.
Wisconsin	Wisconsin will close records for bulk sales as of April 13, 2000. Individual look-ups will require completion of a form specifying which use the request falls under. Written consent from the individual will be required for permissible use 11.
Wyoming	They will pull the federal statute and use AAMVA model law. They added signature to personal information. They will issue temporary rule for 120 days, then initiate formal rulemaking.

Senator SHELBY. Thank you.

I want to ask all of you this question: What is the purpose of a driver's license? Ms. Ferro.

Ms. FERRO. The purpose is fundamentally public safety.

Senator SHELBY. Sure. Mr. Majerus.

Mr. MAJERUS. In my experience—and not with the Polk Company, because we do not purchase driver's license information. But with my past experience, I think that—I think the other purpose is identification. And that—it has come to be the identity card in the State that is called upon when you wish to conduct a business transaction or to appear before a notary or whatever—that you are the person who the license says.

It is—everybody who goes to the airport knows that it is an identification tool if you want to get on an airplane. So, it is certainly, in addition to that, also, a strong identification tool.

Senator SHELBY. Mr. Cross.

Mr. CROSS. The purpose of the driver's license is—as Ms. Ferro said, is public safety, to assure that the people who are driving the roads are capable of driving, and of course, there is a revenue collection benefit, as well. But it has the effect of also becoming an identification card.

Senator SHELBY. Why do States collect personal information and snap photographs before issuing a driver's license? Ms. Ferro.

Ms. FERRO. To ensure that law enforcement—should you be a haphazard driver, in fact, to ensure that law enforcement can identify you at the time that they have a traffic stop, and ensure that it really is you.

Senator SHELBY. Mr. Cross.

Mr. CROSS. Yes. We collect, obviously, the address information for notification, if we should need to notify the driver of a change in their driving status. We also, obviously, use the photograph for identification purposes.

Senator SHELBY. For a government need, in a sense, is it not?

Mr. CROSS. Yes.

Senator SHELBY. If you were called upon. Mr. Majerus.

Mr. MAJERUS. I agree with that.

Senator SHELBY. You agree with that.

Should the U.S. Government sell census data for commercial purposes? Ms. Ferro.

Ms. FERRO. Let me——

Senator SHELBY. Just your opinion. I know it is not——

Ms. FERRO. All right. I will say, from Maryland's perspective—I will not say census data—motor vehicle data, if I may, on this point. Maryland has taken the position that, no, it should not; that it is for——

Senator SHELBY. Mr. Cross.

Mr. CROSS. Wisconsin will comply with DPPA and not sell the data. However, in bulk, I think it could be very useful—not with the personal identifiers.

Senator SHELBY. Mr. Majerus.

Mr. MAJERUS. I think census data is now only provided in demographic form. I do not believe it is provided on an individual household level. And whether they should do that or not, I will leave

that up to the Congress, because I know you debated that before you did the census.

I would point out, however, that some people do rely on that information and find it very valuable. And if the government decided not to do that, they would probably use other methods of modeling and profiling to accomplish the same objective.

Senator SHELBY. Yes. They would figure out some other way, but it would not be using information that is compelled by the government of all of us, as citizens, that we give to the government because we have to. If we do not, we will not get a driver's license, for example.

And second, we are compelled by law to do this, it is required in order to operate a vehicle. We have to give this information and so forth. But most people, I believe, do not realize that this information is being sold after it is extracted from them, for a profit, by the government.

Ms. Ferro.

Ms. FERRO. Well, I would affirm—based on our experience with an opt-out system, I would affirm your remarks. Prior to 1997, I would have said, "No. The public knows it is public, because they come in and buy them all the time, to the tune of $10 million."

Senator SHELBY. Okay.

Ms. FERRO. But clearly, the public was not aware of it.

Senator SHELBY. Okay. Mr. Cross, last year, members of the Conference Committee that we were on, from your State of Wisconsin, insisted that the States party to the South Carolina suit have 90 days from the date of the Supreme Court ruling to be in compliance with the DPPA.

Mr. CROSS. Yes.

Senator SHELBY. We did that. The U.S. Supreme Court, in a unanimous decision you are very familiar with——

Mr. CROSS. Very.

Senator SHELBY [continuing]. Did not take as long as they might have thought to reach a unanimous decision. Your State of Wisconsin, as well as all States, is required to comply with the amendments to the DPPA by April 13, I believe.

Mr. CROSS. That is correct.

Senator SHELBY. What is your department doing to come into compliance?

Mr. CROSS. We are, essentially, in compliance right now. What we did was we had a form that we had used—we were originally—when we were in compliance prior to our joining the lawsuit, we had the forms already made up.

What we did, of course, we had to modify them to take out permissible use 14, but we will essentially be in compliance. However, we are being in compliance by simply not having an opt-in phase, and simply shutting off all—all use of marketing.

Senator SHELBY. Ms. Ferro, in your testimony, you state that the costs of implementing an affirmative consent system is estimated to be $235,000, due to computer programming and new forms. Would you characterize this as a nonrecurring cost, basically?

Ms. FERRO. Yes. The only recurring cost is system maintenance of about $50,000 a year. I would say, there is a cost, also, in lost

revenue from sales of bulk mailing lists of $900,000, but that has not been——

Senator SHELBY. I see.

Ms. FERRO. I am sorry.

Senator SHELBY. Mr. Majerus, at least seven States, including the State of California, our largest State in population, do not permit the disclosure of personal information for commercial purposes. Does this mean that you do not provide personal information to marketers about the residents of California at all, or do you do it in other ways?

Mr. MAJERUS. We do—we do purchase the information for commercial purposes in California. We purchase registration and title information for recall and statistics, and for—for compiling title histories that do not have name and address in them. So, we do purchase records for commercial purposes.

We do—we are not allowed to use those records for direct marketing or solicitation.

Senator SHELBY. Okay. Do you use it mainly for safety considerations?

Mr. MAJERUS. Recall——

Senator SHELBY. That is what I mean.

Mr. MAJERUS. Product recall goes much beyond safety nowadays. There—you know, there is one set of recalls that is mandated by the Federal Government. In some Administrations there is less mandated recalls and more voluntary recalls. There is other product recalls related to motor vehicles that are not safety-related.

And then, in more recent years, there are a number of environmental recalls that are—that happen. So, it goes—it is broader than just the safety issue anymore.

Senator SHELBY. Senator Bennett.

Senator BENNETT. Thank you, Mr. Chairman.

Mr. Majerus, you made a comment that I find interesting, and I would like you to expand on. You say if—if this information is not made available in the ways that it historically has been, that they—your customers—I gather, your customers—I did not get it all written down, exactly, so I may not have it exactly right, but you made the phrase, "they will do more mining for consumer information than they are doing now," and that ironically, that may end up bringing up more information in—in a public way or in a way that some privacy advocates would be concerned about, than the present system would.

Would you expand on that? Because that is a very interesting kind of side effect. We live in a world of unintended consequences as we pass legislation here. And I just kind of caught that as you went by, that maybe the side effect in one area will be a lessening of privacy, because of more mining of this.

Can you tell us what you mean when you say, "do more mining"?

Mr. MAJERUS. I will use—I will use the——

Senator BENNETT. Did I get the phrase right?

Mr. MAJERUS. Yes. I will use the Chairman's example in California, where we are unable to use vehicle-specific data for direct marketing. In those States, our clients have to use other data to try to achieve similar results.

As I pointed out in my testimony, first of all, it is more expensive and it is not as effective. But what they do is they compile other data, they look at other data, they do profiling, they try to make a relationship with the type of product that they are selling, and they collect, actually, more information on the consumer than they would before.

Privacy issues——

Senator BENNETT. What sources do they have for that, that would allow them to do that?

Mr. MAJERUS. Other sources within the industry. They may purchase data from other sources that collect information. Nowadays, everybody collects some. Not everybody sells it, but there are some that make it available for specific purposes.

I think privacy issues—I think it is careful to—or maybe we should recognize that privacy issues do not necessarily arrive from the source of the data, whether it is government data or whether it is private data, but on the subject matter, and whether the subject is sensitive, like, financial information, medical information, or other information that they consider—that the public considers very sensitive, and of course, the use of that data and how it is used in the end—whether it is used for honorable purposes or not.

Senator BENNETT. Let us go back to the first panel for just a minute, and Ms. Herman. Are there sources that could be used to achieve the goal of identity theft outside of government that might be stimulated by a change in the government's situation; that people would say, "Gee, I can get it someplace else"? In other words, are we going to exacerbate the kind of problem that she was talking about or not?

Mr. MAJERUS. That is possible. Again, it depends on how the data in the industry is protected and how careful the industry is who gathers that data and whether they make it available.

In some cases, they are very protective of that information. In most cases, they are very protective of that information. I am unaware of an incident where identity theft arose from somebody putting together a marketing list or getting marketing lists.

Quite the contrary, that we are occasionally contacted by people who want to know what type of information we have on them, because they feel that their identity theft was—or their identity may have been stolen, and they are wondering whether any of that information would get back to us in some way—whether it would be a change of address or something along those lines.

So, sometimes, that serves as a help to people who are concerned about their identity theft.

Senator BENNETT. Thank you. Thank you, Mr. Chairman.

Senator SHELBY. I want to thank all of you for appearing here today—both panels—and I appreciate your candor.

What I have heard here today convinces me that Congress did the right thing on the Transportation Appropriations bill last year, except we may not have gone far enough.

SUBCOMMITTEE RECESS

I am going to continue to work in this area, because I myself, think that this privacy belongs to the individual. And especially, where government compels you to provide this information, the

government, in my opinion, should not sell, barter or transfer that data.

Thank you, all. The meeting is recessed.

[Whereupon, at 11:48 a.m., Tuesday, April 4, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

TUESDAY, JULY 25, 2000

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:45 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Richard C. Shelby (chairman)presiding.

Present: Senators Shelby, Specter, Campbell, Lautenberg, Reid, and Murray.

OVERSIGHT HEARING ON AVIATION CONSUMER SERVICE AND DELAYS

DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

STATEMENT OF HON. JANE GARVEY, ADMINISTRATOR

OFFICE OF INSPECTOR GENERAL

STATEMENT OF KENNETH MEAD, INSPECTOR GENERAL

OPENING STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. The Committee will come to order. Good morning.

The subject of today's hearing is something that almost everyone in the audience has some expertise in. I expect that almost everyone in the room has experienced airline flight delays and questionable airline passenger service, or they are afraid to fly—one or the other.

I thought that having a hearing today toward the end of the summer storm season would allow us to discuss some of the issues and challenges facing travelers, the FAA and the airlines, while all three of these groups struggle with the frustrations and the inconveniences of summer air travel.

During these peak summer months when it seems that virtually every American is taking to the air to reach their next business meeting or vacation destination, complaints about airlines have never been greater. Passengers are complaining about flight delays, flight cancellations, missing connections and shoddy service.

It is difficult to open a newspaper or watch the news without hearing another horror story about air travel. Perhaps the only statistic more revealing than the rate of increase in the number and duration of flight delays is the increased number of consumer complaints about poor service.

But that is not to say that there has not been progress in this debate over the past few years. There is wide-spread acknowledgment that congestion, delayed flights, flight cancellations, missed connections and inconveniences to air passengers, caused at least in part by the failure to manage congestion, is a serious problem in America. For when it comes to getting to the bottom of the delays, the air is thicker with accusations than with aircraft.

While everyone agrees that there is a problem that must be addressed, the airlines, the FAA, and passengers have different views on what factors cause the delay problems.

That is why this subcommittee asked the DOT Inspector General to look into the cause of delays and cancellations.

However, we should not have to call in the Inspector General to find out what is causing delays.

The airlines blame the FAA and the air traffic controllers for mismanaging the National Airspace System. The FAA blames bad weather, aircraft equipment problems, and outdated technology.

The air traffic controllers point their finger at the airlines for scheduling so many flights at the same time during peak hours.

Passengers just know the simple truth, that air travel is costly, unpleasant and less reliable than they would like.

There is probably validity to all the points of views that I have related. But we need to get away from the blame game and get to a commonly accepted assessment of the problem and work expeditiously and cooperatively towards a solution.

Over time, new air traffic control system technologies will allow reduced separation standards and will ease congestion somewhat. But I think we should be aware of regarding technology as a panacea.

Rather, I believe we should view technology for what it is, a long-term tool to increase capacity on an incremental basis.

Other reforms are also needed. For example, with the influx of regional jet service, which fly faster than turbo-props, but slower than larger jets, perhaps we need to create new altitudes for those slower jets to fly in. In effect, establishing additional highways in the sky, fast lanes, slow lanes, high lanes, low lanes.

The way I see it, we need to focus on doing two things, increasing air space capacity and doing a better job of managing capacity during disruption, whatever the cause.

The other topic I want to touch on this morning is the state of customer service in the airline industry. One has to only open a major newspaper, or turn on the nightly news, or take a flight to realize that passenger treatment is an issue on the minds of the traveling public.

The Department of Transportation Inspector General has recently completed a 6-month review of the airlines customer service plans, and he will give us his views on their progress in that regard.

The subject of delays and customer service are closely related issues. If a flight is delayed for several hours or cancelled, chances are that passengers are going to have a pretty dismal view of that carrier's treatment of its customers.

Accordingly, if an airline makes a traveler's trip longer by losing baggage, subjecting passengers to surly gate or flight attendants, long lines or cardboard sandwiches for the in-flight meal, a short hop can seem like it lasted an eternity.

I think what starts the airlines and the traveling public off on the wrong foot is the hurry-up-and-wait mentality that pervades the travel experience. We are told to get to the airport at least an hour before flight time, only to wait in line to be processed.

We are told to be at the gate at least 20 minutes before flight time or our seat will be forfeited, only to wait in line to be herded onto the plane like domesticated farm animals.

We are told to be belted in our seats 5 minutes before scheduled departure, only to pull away from the gate and be held hostage until the airline's real schedule or the system can accommodate us.

When we get down to it, the passenger is a captive in the system from the moment he or she arrives at the airport. That is the nub of customer dissatisfaction and frustration with air travel, and why some of my constituents and colleagues believe it may take an act of Congress before many airlines will treat their customers with more respect and offer better, more reliable service.

I would note that some airlines do a better job than others in both of these areas. And perhaps the Inspector General will name some names this morning.

I would also note that some of the point-to-point carriers and the low-fare airlines offer better passenger treatment or do a better job of communicating to passengers what to expect and in recovering from disruptions to their flight schedules than the hub and spoke carriers.

That leads me to believe that we can do things better and that the airlines can treat passengers better. But that passengers or the Congress has not yet found the right way to get enough attention on these issues.

While all the network carriers compete on a non-priced basis for the high-fare passenger, what have the airlines done to help the non-business passenger? Ask any mother with small children how much they look forward to traveling the friendly skies. In the name of productivity, some have eliminated the outdated practice of allowing mothers and small children the option of pre-boarding the aircraft.

I guess it was inconvenient to the flight attendants or the first-class passengers. If eliminating that courtesy has made the departure more efficient and timely, the airline should look into streamlining the process even more.

Let us have the first-class and the titanium, millennium, premiere status frequent flyer board with a mother struggling with two car seats, a stroller to gate check, the diaper bag, and two little ones. I would hope that the airlines could find ways of expediting the boarding process without making travel anymore stressful.

I believe Senator Reid—Senator.

STATEMENT OF SENATOR HARRY REID

Senator REID. Thank you very much, Mr. Chairman. I appreciate your holding this hearing. This is very timely.

Mr. Chairman, I do not know about the rest of you, but every time that I realize that I have to go home, which is very often, the day before the flight is ready to take off, I start getting a little anxious.

I wonder—I am wondering if the plane is going to be there when I get there. And if the plane is there, are we going to have a crew there. And then are we going to be taken out to the airplane and left on the airplane at the gate. And then are we going to be taken from the gate and left out on the tarmac some place.

All these things with my almost 20 years of experience here cause me to be a little bit anxious when I get ready to go home.

In recent weeks, we have seen a series of news reports that made my feelings—I guess the feelings of most Americans, because what we are told in a report that has not been totally completed, the Inspector General has released an interim report indicating that passenger complaints to the Department increased 74 percent since last year. And complaints about delayed, cancelled and re-routed flights were up 115 percent, more than double last year.

The report also indicated that airlines have done a poor job communicating the reasons for delays and cancellations to the customers. According to the report, the information provided by the airlines was frequently inaccurate, incomplete or unreliable.

Last year, in response to Congressional pressure, which you played a key role—which you are to be commended, Mr. Chairman—the airlines announced plans for voluntary reform.

But these numbers and my personal experience indicate that things have not gotten better. More—more than likely they have gotten worse.

So something needs to be done. Mr. Chairman, I have introduced some legislation. I introduced legislation about an air rage bill. I want to make sure that the hard-working airline employees are treated fairly.

I have had—I had an experience on an airline—well, actually on two occasions where these people were—the flight attendants were treated physically bad. And this—there is untold numbers of reports about how badly they are treated.

The—my air rage is now law. And no longer can the public treat flight attendants and other airline personnel as they have in the past—mean, actually physically abuse them and expect nothing to happen.

Now, something will happen, both civilly and criminally. And that is the way it should be.

And I have also introduced—I have worked very hard on the appropriations committee and this will be the second year of funding of which you have been a part of that, Mr. Chairman, where we—we are making sure that the cabin air quality—the air that passengers breathe is clean and safe.

We do not know about that. You hear all kinds of conflicting reports. Johns Hopkins University is studying that to make sure that is the case.

I also introduced last year an air traveler's fair treatment—last week, an air traveler's fair treatment act, which is aimed at some of the most pressing issues like giving prompt and accurate notice of delays, setting uniform regulations for medical equipment training, giving customers greater access to fair ticket prices, and a number of other things.

I am also working—this is the first year we have gotten money—and, again, Mr. Chairman, you have worked with us on this—to have off-site baggage check-in so that somebody can go directly to the gate, their baggage is already checked in and it is safe. It is better. And it will relieve tremendous congestion at airports.

This is a study that has been going on. People believe it will work. And we have tested it, and it will work.

But, Mr. Chairman, in spite of these things that I have done and other members of Congress have done, I think it is time to step back and take a broader view of the underlying causes for this congestion and delay, and examine more fundamentally what the Federal Government can do to help address these underlying causes.

As you have already indicated, it is not all the fault of the airlines. And that is an understatement.

Hardly, any new airports are getting built. We built a new one in Denver, closed one in Denver—net gain of nothing.

We have—our highways are clogged to capacity. Our airlines—our airports, I'm sorry, are clogged to capacity.

We add no new airports, but we keep adding new flights. And I mentioned recently, Mr. Chairman, to an airline—some airline people, I think they should understand they are not in the airline business. They are in the transportation business.

And they need to take a look at helping in other ways. I think they could make money doing this.

Senator Moynihan and I have worked very hard to develop different ways of carrying people for distances up to 300 miles, airline travel is very inefficient, but yet we have people all over America traveling 300 miles or less by air.

What we need to do is do what they are—what Danby and Powell, a couple of scientists from MIT who were stuck in traffic in New York in the sixties—they said, "This is wrong." And, well, to make a long story short, Mr. Chairman, they developed what is called magnetic levitation.

The Federal Government helped fund that for a few years. We stopped funding it. That all went to Germany and Japan. Now, we are going to be buying the technology that should be ours and the equipment that we should be manufacturing here from Germany and Japan.

I think the airline business should help us, the Federal Government, take a look at getting into some of this, traveling between Las Vegas and L.A. That is less than 300 miles.

Those vehicles go 300 miles an hour. They are safe. They are non-polluting. And we should move to that type of travel, because our rail travel now is—even though Amtrak—I am a big supporter of Amtrak, it is very old-fashioned and we need to do better.

Air traffic controllers, understaffed, underworked—overworked, I am sorry—and at major airports often working with air traffic control systems that are obsolete and in dire need of repair and up-

grade. Some of the systems at our busiest airports are decades old, and we are installing stuff now even—that it has taken 20 years to get it ready to be installed—it is old before we put it in.

So when I am on an airplane, I recognize that the people who are making my flight safe are the air traffic controllers. These people are the unsung heroes of modern aircraft safety. I mean, I cannot stress enough how much I appreciate their hard work.

And the pilots, we do not hear much from the pilots, but they also are to be complimented. We need to get—and I am glad that you are going to have here, Mr. Chairman, someone from the air traffic control network to talk about air traffic control.

We need their input. We need pilots' inputs. We need input from the airline. And we, as the Federal Government, have to step up—step up to the plate and start spending more money. As you have indicated in your statement, we need—we need new traffic lanes through the air.

The State of Nevada, about over 40 percent of the State of Nevada, you cannot fly over. It is restricted military. We got to take some of these—take a look at this. If we can in Nevada and other places change that.

So let us step back and figure out what the FAA needs in order to do its job. The number of flights keep increasing. It is going to cost us, but the Senate has just passed some bills that we are cutting a lot of taxes, which is great. But maybe we should not cut taxes as much for some wealthy people; instead let us give some money to some of the people that will make it safer for all of us to fly.

We need to buy more simulators for air traffic controllers to help new controllers learn more quickly. Right now, new controllers are required to have more separation between planes on the runway, which contributes to delays, simply because they have not been trained enough through simulators.

We need to do a better job educating passengers about what is going on behind the scenes. Maybe we can think about putting up electronic weather maps in airport terminals so that passengers can see for themselves the weather fronts that might be keeping them on the ground.

Or maybe we can set up information kiosks so that they can better understand the kinds of mechanical or safety problems that might delay a flight or why a weather front in Cleveland would hold up a flight in Las Vegas.

Or maybe the Federal Government and the airline industry needs to widen its focus. Instead of thinking of themselves as only being in the airline business, as I mentioned, maybe we can start viewing ourselves as being in the transportation business and look at supplementing air travel through alternatives.

These are just some of my ideas, Mr. Chairman. My fundamental point is that the causes of gridlock at our airports are complex. I think we need to be creative in finding solutions, because what we are doing now is not working.

I commend, again, you for your interest. I am looking forward to working with this Committee to find ways to improve the quality of air travel.

And I ask your permission, Mr. Chairman, I have—the Senate is going to move off the morning hour at 10:30, and I have to be there to make sure that the Republicans treat everybody fair.

Senator SHELBY. Thank you, Senator Reid.

Senator Campbell.

STATEMENT OF SENATOR BEN NIGHTHORSE CAMPBELL

Senator CAMPBELL. Thank you, Mr. Chairman, for holding this very important hearing this morning. It could not have come at a better time. We all fly. I happen to fly home every week, as Senator Murray often does too. I often see her just as frustrated at the airport as I am.

And what is interesting is that people recognize us in the crowd will often come up and complain to us and say, "Senator can you not do something about this?"

I guess they are rather surprised when I tell them, "Wait a minute, you have got a story? Let me tell you my story."

I guess they think somehow we get a better deal and that we can get on them when they are not flying for anybody else. But we—we face the same kind of complaints.

And I think the night before last, I have to tell you, was a good example. I thought I was going to have a bill that was going to be on the floor yesterday, so I went to the airport Sunday afternoon, where I saw Senator Murkowski and we got on a plane. Then we were told after we sat on the plane for about a half an hour, there was going to be a delay, because one oxygen mask on a portable oxygen bottle was missing on the plane. I guess the FAA regulations are that the whole plane has to be checked for oxygen leaks or something, if one little old mask is missing. And so they ended up cancelling the flight.

Senator Murkowski never did get on a flight that night and had to cancel a very important hearing, because he could not get here. I managed to get on what is called a red-eye, which we all hate, but often have to get on.

The only red-eye was going to leave Denver at 11:30. It got out of there about 1:00 in the morning, and I ended up getting here about 8:00 o'clock the next morning, just absolutely ringy as we all are when we have to catch those flights. So I am just as fed up and frustrated with the delays as anybody else that is flying.

Senator Reid mentioned a number of things that I assume were supposed to be in the purview of the FAA, whether it is pilot training, air separation, whether it is dealing with the virus loaded oxygen that we keep breathing on those airplanes, or air traffic controllers, and so on.

I do not think we can micro-manage all of that, very frankly, from Congress. And we should not. But clearly they are some of the things that people are beginning to worry about.

I am not opposed to flying. I happen to—I used to fly. I have about 600 hours in high-performance single. I am IFR-rated. I used to love to fly.

But very frankly, when I get done with this job I have already told my wife, I am going to take a note out of John Madden's book and buy a doggone bus where I have a pretty sure chance I am going to get there.

From where I take the mainline to Denver, I have to take a commuter for another hour, if I fly. It is a 6-hour drive. But on many occasions, I have ended up having to drive the 6 hours because I could not get on a plane.

If I had known when I first got to the airport in Denver the planes were going to cancel, I could have just got a car and taken off. The real problem is you sit around there when they say, "Well, one more half hour, or another hour we will have a definite decision."

And you keep—they keep milking the thing. You keep staying there and staying there and staying there until you eat up 3 or 4 hours when you could have been on the road at least driving to where you were going to go. So we all face that too.

And I guess while I am on this tirade, I might also say I wish they would change some of the comments they always make, you know, at the beginning of the flight—the flight attendants always say something, "In case of emergency," and then they go through this—this dialogue.

"In case of emergency," I am beginning to think is sort of code words for "In case we crash." And they say, you know, pull down the handle, turn the door to the side, throw the door out, all that kind of stuff. Have you ever seen one of those things after they crash?

I think they ought to change the whole rhetoric and be honest and say, "In case we crash, forget the door and start praying."

Thank you, Mr. Chairman.

Senator SHELBY. Senator Murray.

STATEMENT OF SENATOR PATTY MURRAY

Senator MURRAY. Mr. Chairman, I would like to thank you for having this hearing——

Senator SHELBY. You are welcome.

Senator MURRAY [continuing]. And thanks to our speakers today for coming to talk about an issue that obviously really makes most people irate. Senator Campbell and I have spent many hours in the airport together trying to get back to the west coast.

I travel 6,000—over 6,000 miles a week. And I have heard every comment and every frustration from travelers. Concerns have increased dramatically over the 8 years I have been doing this. I think there is a lot of fingers to point and I think the airlines themselves do need to make this commitment.

The comment I hear most often is if they would just tell us the truth. Senator Campbell just mentioned that. Why? Because if—if it is not going to be as busy as you say, we will find another way to get there.

This is probably the biggest frustration. People want safe ways to fly. But they would like to have the truth from the airlines, and I think that is critical.

But, Mr. Chairman, I think this hearing is important because it points out that this is more than the airlines' responsibility. We have a responsibility in Congress to make sure that we have the infrastructure in place to accommodate the ever-increasing number of Americans who are flying.

Modernizing air traffic control, making sure that strong competition is in place, and making sure the infrastructure exists is something we have to do. I think it is very important that this Committee in particular hears this topic and looks for ways that we can help solve this ever-increasing frustration that many Americans are facing. So thank you for having us here.

Senator SHELBY. Senator Lautenberg.

STATEMENT OF SENATOR FRANK R. LAUTENBERG

Senator LAUTENBERG. Thank you very much, Mr. Chairman. I am sorry for the delay, but conditions beyond our control prevented me from being on time.

Senator SHELBY. You must have been on an airplane.

Senator LAUTENBERG. I thought that would get at least a snicker.

Senator SHELBY. Well, it got one.

Senator LAUTENBERG. Okay. Thank you very much. I listened to my colleagues with great respect and with a degree of monotony because we are all going to say the same thing.

Just like our constituents across the country, we are not getting the kind of service we are paying for, and it is appropriate that we are meeting at this time. We just saw a published report on delays. And in this past month, June 2000, the number of monthly delays across the country topped 50,000 for the first time. The number more than doubled from the same level—from the level experienced, rather, 6 months earlier, December 1999.

And when I look at that card up there and I say, "Well, there is the report card." Now, if I was the teacher or if the public was the teacher, what kind of grade do we think that the airlines and their partners in managing the aviation system would get.

It would not be a very good mark in my view when I see "offer the lowest fare available and notify customers of delays"—I do not know how many of you get phone calls that say, "Sorry, Mr. Smith, but your plane is delayed two hours."

What I get is, "The flight is on time. We know that there are thunder storms, snow storms, lightning and dangerous conditions, tornadoes, but we expect to be taking off on time."

And when you get there, you find out that you are in good company with lots of other disappointed people, so we are—this is not, Mr. Chairman, I am assured by your balanced view of things—I know this is not to be a vendetta.

But we are going to ask some questions and find out for the public why it is that the answers are so foggy and so often delayed.

The FAA tells us that the same time frame, the number of delays attributable to bad weather grew by almost 150 percent, but we also know that several airlines have struggled to keep up with the record demand for air travel in terms of having the right crew, the equipment in place at the right time to ensure that the flights take off on time.

And it is appropriate that this hearing combines two of the issues, delays and customer service. Nothing challenges the airlines' ability to provide quality customer service like crowded airplanes, sitting on a taxi way for hours as a thunder storm passes overhead, but we also know that when it comes to providing quality customer service, the airlines can do a much better job.

Jane Garvey—we are happy to see our FAA administrator this morning—is going to be testifying on the topic of delays. And in her testimony, as usual, Ms. Garvey exhibits her candor and her commitment to improvement.

We appreciate that, to always be willing to speak out on the issue, because hiding them is not going to make them go away. As a matter of fact, sometimes we speak out and they do not go away. But we will have to work on it.

She points out that in the past the FAA has been criticized appropriately by the airlines for not treating them like customers. But I would point out that the inspector general, Ken Mead, who we often see telling us what is happening in the real world is also here this morning to testify that several of the airlines have taken the liberty of blaming the FAA for their own problems.

The I.G. has identified several instances in which several airlines have blamed delays on the FAA when, in fact, the causes were attributable to extremely bad weather, crew unavailability, or maintenance problems.

So while I appreciate the fact that the airlines would like to be treated more like customers, I would point out that airline passengers would like to be treated more like customers than cows by the airline. At a minimum, they do not want to be lied to.

Last year, Congress balked at the enacting of a passenger bill of rights. In my view, it was a mistake. Unfortunately, the leaders of the Senate Commerce Committee decided to accept a voluntary customer service commitment on the part of the airlines.

And it was later found out that of the 12 commitments the airlines made, only two of them were new. Ten of these so-called commitments or maybe commandments were already required in law or regulation.

The I.G. will testify this morning the performance of the airlines in meeting even the 10 long-standing customer service requirements is mixed at best.

Six months from now, the inspector general will be doing a follow up review of the airlines' performance on these commitments. I will not be here when my colleagues receive that review. But I hope that my colleagues will not flinch at moving passenger rights legislation, if the I.G. finds that the airlines have yet again failed to live up to their word.

I want to say something. I am not an opponent or a particular critic of airlines. They do a pretty darn good job. Our system is fundamentally safe. We get a lot of passengers moved through the place each and every day, almost each and every hour of the clock.

But the fact of the matter is that they are not very free with their information. They are not very generous with the way they treat cancelled flights or cancelled seats, which is a worse condition.

I have had a couple of those. And I do not speak for myself, because I represent the whole of New Jersey and the country when I am in this job of mine.

But cancelled flights, I got to a flight. It was 15 minutes to go. It was oversold and the seats are filled.

So I said, "Well, why do you not offer somebody a bonus to hop off." Well, they went through, they said no one would take it.

But they were not going to give me the bonus that they would have given to someone else, because there was someone sitting in the seat. Well, in my position, you do not make too much of a fuss, even though your blood is boiling. That is one of the reasons why I am retiring—make the airlines fulfill their promise.

Anyway, all estimates are that aviation traffic will continue to grow. A prosperous economy has brought us ever more crowded runways. Airlines experienced record high-load factors, even though the planes are packed full.

And I guarantee you that if I ask for a show of hands, there would be people here who would tell you that on a short flight between here, let us say, and New York—that includes Newark, that includes Westchester County—that many times the delays have been far longer than the air time, that the flight takes to get there.

And that is a terrible annoyance, frustration that lots of time it results in cancelled critical appointments, be it doctors, be it business, be it family—pick up a child coming out of school or something of that nature. It is not an acceptable condition.

In my region of the country, the growth in traffic will put an even greater strain on an already stressed system.

Mr. Chairman, I have got a considerable challenge representing the most delayed airport in the United States, Newark International. It has been the most delayed airport for each of the last 3 years and 9 of the last 12 years.

And I was commissioner of the port authority when that airport was being developed. And I am especially pleased that we have Ed Kragh here, a controller from New York. He is going to tell us things as he sees it.

I am interested in gathering his views, as well as those of Ms. Garvey and Mr. Mead on how we can specifically address the challenges related to the very congested air space, not only in the New York/New Jersey region, but across this country.

And I thank you very much, and I am sorry to take so long, Mr. Chairman.

Senator SHELBY. Thank you.

Our witnesses today are the Honorable Jane Garvey, Administrator, Federal Aviation Administration, U.S. Department of Transportation; the Honorable Kenneth Mead, Inspector General, U.S. Department of Transportation; Mr. Edward Kragh, Newark International Airport Air Traffic Controller, Secretary, Newark Local, National Air Traffic Controllers Association.

We welcome all of you here today. Your entire statement, all of them will be made part of the record in their entirety and if you would take a few minutes to sum them up.

We will start with Ms. Garvey.

Welcome, Ms. Garvey.

STATEMENT OF JANE GARVEY

Ms. GARVEY. Thank you very much, Mr. Chairman, Senator Lautenberg and members of the subcommittee.

AVIATION SAFETY

First of all, I do want to thank you for the opportunity to testify before you today. It is an important issue and we appreciate the Committee's great attention to the issue.

Let me state at the outset, and you may hear me say this again, that we at the FAA are willing to do whatever is within our power to improve the efficiency of the air traffic system, so long as safety is not compromised. That safety is of paramount importance, is clearly supported by everyone engaged in this discussion, in this debate.

2000 SUPPLEMENTAL FUNDING

Before I begin, I do want to publicly take this opportunity to thank the Subcommittee for its very strong support of our fiscal year 2000 supplemental funding request. Through your personal support, through your personal leadership, the $75 million approved earlier this month will allow us to hire more safety inspectors, to replenish our inventory, and to restore the level of redundancy that is so important for our system.

Without your support and leadership this would not have been possible. And on behalf of everyone at the FAA, thank you.

DELAYS

Delays, as you all have said, have a significant financial, significant service consequences for the airlines and certainly result in understandable frustration for their passengers. There are many conditions that cause delay. I know the Inspector General will go into that in more detail. But everything from bad weather to inoperable runways, to airport capacity limitations, to equipment problems, crew problems and, yes, air traffic equipment outages and air traffic procedures.

Delays, while they will never be eliminated—and that is certainly true—but it certainly is our job, our challenge to minimize delays. I think it is a challenge for all of us, for us at the FAA, for the industry, for the unions, for the pilots, to work to minimize delays in whatever way possible—again, without compromising safety. I think it is important to say that sometimes delays are really a built-in safety mechanism. We do not want to lose sight of that.

You all have mentioned the great growth in the economy. And I think that is important. It is important to recognize really what has happened to air travel in this country. The deregulation of the airlines combined with what is an extraordinarily healthy economy has led to a huge increase in passenger air travel.

A 190 million more passengers are traveling now than 10 years ago. In addition, if you look at some of our busiest airport hubs, they are growing at 15 to 20 percent per year. That is significant. When the system is running at or near capacity as it has been, a large number of severe thunder storms can create havoc with our aviation system.

A few facts just from last month, during June we had severe thunder storms from Canada to Texas for 12 consecutive days. We had 19 days of bad weather compared to 5 in June 1999.

And on just 1 day, June 27, the National Weather Service issued a record 281 severe weather warnings. That has an impact.

SPRING/SUMMER PLAN

In light of the increases in delay, as this Committee knows, we joined together with the industry and, again, I want to note it is the industry, including the pilots and the unions as well as the airlines, to create the spring/summer 2000 initiative. The whole goal was to better manage air traffic during severe weather. We focused on maximizing the use of the available air space, on improving communication between the FAA and aviation system users, and expanding the use of new technology to help reduce delays.

And we were taking the approach that we had to approach this together. A little bit about how the plan works.

Every morning at the Air Traffic Control Center in Herndon, the strategic planning team comprised of command center traffic management specialists, airline representatives, and air traffic operation managers from field facilities agree on a common weather forecast. First, they have a telecommunication or teleconference at 5 a.m. in the morning; and a second one at 7 a.m. in the morning. And I will tell you that I have looked into these conferences and heard the communication among the airlines and the FAA, and the whole goal, again, is to come up with a strategic plan for the day.

It is particularly important on a bad weather day. It is a consensus plan. It is not dictated by the FAA. It is jointly developed by a team that knows it best.

Throughout the day, the team reviews the common weather forecast and as the conditions change, they update the plan every 2 hours until 10 p.m. in the evening. The key is better communication and the sharing of information.

So the critical question is: Is it working? How is this plan working? I think it is working in terms of communication. We have common weather information that is being disseminated. We have not had that before.

We are sharing real time arrival and departure capacity information at the major airports to allow airlines to change their flight plans in the event of severe weather.

Predictability is key for the airlines. Some airlines have told us that even with the increase in severe weather days, our collaborative efforts allow them to plan better and to execute operations in advance of the severe weather. That approach provides the predictability that the airlines need to manage their operation.

I will tell you that we are not fully there yet and there are areas that need improvement. For example, we are discovering that airlines have very different approaches to some of the problems that we are facing. Trying to negotiate a plan that everyone agrees to is sometimes a challenge. For our own house, that is the FAA, I sometimes feel that the field facilities are not playing full out. And really making sure that coordination from the Command Center is occurring all the way down to the individual field facilities is something that I think we need to constantly be focused on and to constantly work on. But I think overall the approach is the right approach. And if you ask the airlines, I think most of them would say that this is the right approach.

SOLUTIONS

I also want to stress that the spring/summer plan is a piece of a large solution. And again, I think the Committee has articulated this very well this morning. The delay problem is complex. The solutions must be multi-faceted.

It is going to take all aspects, all members of the industry coming together, airports, airlines and the FAA. For airports, they have a real challenge and that challenge is to work with communities to create coalitions to support the kind of runway capacity enhancements that are so needed. For the airlines, they really need to look at their own procedures, for their aircraft mix, and how they schedule flights. And certainly we, at the FAA, need to continue to successfully modernize our air traffic control system.

I think we have made great progress in the last 2 or 3 years, but I also think we need to stay very aggressively focused on that goal. Let me say that I would like to end where I began, and that is to say at the FAA, we will do everything we can to work with the airlines, to work with the unions and work with the industry to improve this system for the traveling public. Our focus should be and is on solutions.

One anecdote, one story, and that is several weeks ago, we came together with the airlines, with the unions to talk about some tactical strategies we could develop for the summer. The suggestion that came out of it was to focus on some choke-point areas, areas where we were having the most critical problems. I cannot tell you whether it was the union or the FAA or the industry that came up with that suggestion. But the point is it was a good suggestion. It was the coming together of all aspects of the community and saying let's figure out tactically what we can do.

PREPARED STATEMENT

We now have 21 recommendations that grew out of that session. And I think that is the right approach—doing it collaboratively, with—and in cooperation and the recognition that all of us own a piece of this solution.

Thank you very much, Mr. Chairman.

[The statement follows:]

PREPARED STATEMENT OF HON. JANE F. GARVEY

Chairman Shelby, Senator Lautenberg, Members of the Subcommittee: I would like to thank you for the opportunity to testify before you today on the important topic of airline delays. We welcome this Committee's interest in this serious issue. Let me state at the onset that we at the FAA are willing to do whatever is within our power to improve the efficiency of the air traffic system, so long as safety is not compromised. That safety is, and should remain, of paramount importance is clearly supported by all parties to the debate.

Before I begin, I want to take this opportunity to thank the subcommittee for its strong support of the FAA' fiscal year 2000 supplemental funding request. Through your personal support and leadership, the $75 million approved earlier this month will allow the FAA to continue the service, reliability, and performance of our air traffic control system (ATC) to the level the industry and the American public expect. Without your support, this would not have been possible.

Delays have significant financial, scheduling, and service consequences for airlines and result in understandable frustration for their passengers. The issue of delays is very complex. There are many conditions that cause delay; bad weather, inoperable runways, airport capacity limitations, aircraft equipment problems, maintenance and crew problems, and, yes, air traffic equipment outages and air traffic pro-

cedures. Delays will never be eliminated, but it is the job of the FAA to work to minimize delays to the greatest extent possible, without compromising safety. I will acknowledge at the outset that, in the past, FAA has been criticized, with some justification, for not fully appreciating the total reliance of airlines on air traffic control. No other industry is as totally dependent on the Federal Government action to produce a product. Airlines felt that the air traffic control team should be more sensitive to the carriers' complete reliance on their efforts and that the airlines should be thought of and treated more like customers rather than users of the system.

In light of the increases in delays, and the need to establish a collaborative planning process between the FAA and users of the National Airspace System (NAS), President Clinton announced on March 10 the creation of our Spring/Summer 2000 plan for reducing aviation delays. At the heart of this initiative is a collaborative plan developed by industry, labor, and Government to better manage air traffic during severe weather. It maximizes the use of available air space, improves communications between FAA and aviation system users, and expands the use of new technology to help reduce delays. Decision-support tools and information sharing are absolutely essential to the success of the Spring/Summer 2000 plan.

Here is how the plan works:

Every morning at the Air Traffic Control System Command Center in Herndon the Strategic Planning Team, comprised of Command Center traffic management specialists, airline representatives, and ATC operations managers from field facilities, report at 5:00 Eastern time. The team agrees on a common weather forecast by 6 a.m. This is a first—previously the FAA and the airlines worked from separate forecasts, which could be different and often were.

By 7 a.m. the team has developed and released the day's first Strategic Plan of Operations, which includes collaborative measures designed to respond to predicted constraints in the National Airspace System. Constraints can include weather, airport construction projects, aircraft incidents, and any equipment failures. This is a consensus plan, not dictated, but jointly developed by a team that knows it best.

Throughout the day the team reviews the common weather forecast, and, as conditions change, updates the plan every two hours until 10 p.m. Eastern time.

Perhaps the most important decision-support tool for the group is the Flight Schedule Monitor. This collaborative decisionmaking tool provides a shared database of current flight information that allows the Command Center and the airlines to be on the same planning page.

We know this approach is making a difference. Some airlines have informed me that even with the increase in severe weather days so far this year, our collaborative efforts enabled them to better plan and execute operations in advance of the severe weather. This is the key to our Spring/Summer plan.

While our Spring/Summer plan represents a new approach to air traffic management, we need to keep this in perspective. I do not want to suggest that this new approach will eliminate delays. That is not possible. What we are doing is providing the basis to better manage delays through continuous communication and collaboration. This approach provides the predictability that the airlines need in order to manage their operations. Predictability is key.

I also want to say that some airlines take different approaches to predictions of severe weather. The FAA is not only working with many challenging issues, such as weather, airport capacity, and airline scheduling. We are also working in an environment in which our customers are in fierce competition with each other. Collaboration it not always easy in such a competitive industry.

While I am satisfied that FAA is stepping up to the plate, acknowledging our shortfalls and working in a productive and collaborative way to deal with them, air traffic control faces significant challenges in both the short and long term. The advent of regional jets offers more service and competition opportunities to airlines and communities. Regional jets, however, are using the same runways and flying at the same altitudes as larger aircraft and put more demand on the system than the turboprops they are replacing. This has the effect of reducing controller options, especially during peak periods. For example, one air traffic procedure controllers use with turboprops that has served to increase capacity is land and hold short (LAHSO), which is not an option for regional jets at certain airports. Regional jets, as compared to smaller turboprop aircraft, require a longer distance to stop. They can land, but cannot hold short of intersecting runways that are also in use. They are also slower on take off. Thus, when larger, faster turbojets are taking off behind them, ensuring aircraft separation becomes more challenging. Also in the enroute environment, regional jets, which operate more slowly than the new fleet of commercial aircraft, create a mix of speeds at altitude that will get more complex as the number of regional jets increase.

A further factor that complicates air traffic control, and one over which the FAA has no control, is that of airline scheduling and airport capacity. At the risk of stating the obvious, air traffic is a dynamic situation. Every procedural enhancement, every step forward in modernization, every improvement in efficiency, cannot be measured in a static environment, but is evaluated in light of daily changes in weather, runway availability, and airline schedules. Consequently, the installation of an Instrument Landing System (ILS), enhanced radar, or a reduction of miles in trail requirements may not necessarily translate into a reduction of airline delays, even if efficiencies are achieved. The FAA clearly has an important role to play in the reduction of airline delays, but this responsibility is shared with airlines and airports. True progress can only be realized when all three players accept their roles and work in cooperation with each other.

As Members of this Committee know, the issue of airport capacity is very politically sensitive. Whether local communities are discussing new runways, new terminals, or new airports, the debate is always heartfelt and emotional. While FAA will continue to make those improvements to the NAS that are within our control, improving how the aircraft are controlled in the air does not necessarily ensure them a speedy decent to the runway. Hard choices will have to be made at all levels of government with communities across the country to ensure that we have the infrastructure in place to accommodate anticipated demand.

Notwithstanding the airport capacity issue, FAA's longer-term role, and one in which we are currently engaged, is enhancing the system for a new era. This effort includes redesign of our nation's airspace and air traffic control (ATC) automation. The National Airspace Redesign is expected to take approximately eight years to be implemented across the entire country, but tangible benefits are expected in the eastern portion of the United States within five years. The most congested and complicated airspace is east of the Mississippi River. Because this airspace poses the most challenges, it is the initial focus of our redesign. Our goal is to establish comprehensive processes and procedures to ensure adaptable and flexible airspace that meet the demands of the future NAS. Equally important are the procedural changes we are making on a continual basis as the opportunities arise. For example, we have begun the use of military airspace to facilitate the north-south flow of air traffic along the east coast.

Another important aspect in our effort to improve the management of the air traffic control system is modernization. As Members of this Committee know, we are well into a successful modernization plan. I have stated in the past that our modernization efforts are essentially divided into three areas. The first category is to sustain our current system by replacing aging equipment and renewing the infrastructure (the Display System Replacement (DSR) and Airport Surface Detection Equipment). The second category will add safety features, including weather related enhancements (improved enroute surveillance and improved weather on Standard Terminal Automation Replacement Systems—STARS). The final category will improve system capacity and efficiency (Free Flight Phase I). Taken as a whole, modernization will improve the controller's ability to manage increasing levels of traffic. Decision support tools are being developed to facilitate more efficient routings and shorten airborne time. The reliability of the system is also being increased, thereby increasing confidence in system. We continue to develop technologies and equipment that will result in safe reductions in aircraft separation.

I am very confident about our modernization program. Our incremental approach to modernization ensures that we resolve problems at an early stage in project development. This attitude, which highlights our lessons learned from past FAA practice, means that we are acknowledging and dealing with problems when it is more cost effective and easier to do so. Some benefits of this approach are that all HOST computers have been replaced, we have completed the transition to DSR at our air route traffic control centers, and Free Flight Phase I technologies are beginning to provide benefits to the aviation community.

In conclusion, I would like to say that from my air traffic management team, to my modernization team, to our airport folks, the FAA recognizes our responsibilities and our challenges when it comes to aviation delays. We are working aggressively and cooperatively to meet them. Mr. Chairman, I will be happy to answer any questions.

STATEMENT OF KENNETH MEAD

Senator SHELBY. Mr. Mead.

Mr. MEAD. Yes, thank you, Mr. Chairman.

Senator Lautenberg, I hope when you retire you will continue to write in from time to time about your experiences in the world of transportation.

Senator LAUTENBERG. I plan to.

Senator SHELBY. He is not going to write to us, though, is he?

Senator LAUTENBERG. I am going to write to my Senator.

Senator SHELBY. Okay.

Mr. MEAD. We have two reports here. One was requested by this Committee and deals with flight delays and cancellations.

DELAYS AND CANCELLATIONS

The other, which was issued a couple of weeks ago, has to do with the customer service commitments. As you know, the A.T.A. and 14 of its member airlines pledged to improve customer service and voluntarily signed the Airline Customer Service Commitment, which is displayed over here.

This was in lieu of legislation. It includes 12 provisions, which each airline was supposed to implement and did implement through plans. Each airline was supposed to have a plan, in other words.

But two of the twelve provisions notifying customers of delays and cancellations and meeting customers' essential needs during long on-board aircraft delays—were in direct response to the growth in delays and cancellations.

Now, I would like to cover our delay and cancellation report before addressing——

Senator SHELBY. Go ahead.

Mr. MEAD [continuing]. A couple of these commitments.

A major finding of our review and something that I think needs very urgent attention in the short term—we found that there is the absence of a system for collecting causal data and reporting a reasonably complete picture of the causes of delays and cancellations from pre-gate departure to arrival at the gate.

The AIR–21 legislation, which Congress passed earlier this year requires this, but there has been little progress in implementing it.

AIR TRAFFIC CONTROL SYSTEM

Meanwhile, what is happening is that the air carriers are blaming much of the cause for delays not on scheduling, but on what they see as an antiquated air traffic control system that does not keep pace with the demand.

FAA points primarily to flight volume and weather—I think, in the neighborhood of 80 percent in that category. And then they say, "Well, we have new equipment." And that is in direct contradiction to what the airlines are saying.

For its part, the Bureau of Transportation Statistics, which also keeps delay and arrival data, does not keep any causal data, but they consider a flight as departing on time as long as it pushes back from the gate within 15 minutes of its scheduled departure time.

Senator SHELBY. Say that again.

Mr. MEAD. All right. This—this is anomalous.

Senator SHELBY. I know.

Mr. MEAD. The Bureau of Transportation Statistics, which also keeps delay data, considers a flight as departing on time if it leaves the gate, pushes back from the gate within 15 minutes of its scheduled departure time, even though you may end up sitting on the runway for three more hours.

So you are telling the consumer that they left on time. The consumer knows they did not leave on time, because they are sitting on the runway.

Senator SHELBY. Who came up with that rationalization? Who came up with that?

Mr. MEAD. I do not know who the author of that was.

Senator SHELBY. Are they still working? He should not be.

Can you find out for us just to find out who came up with that? I would like to share that with my colleagues.

Well, go ahead, Mr. Mead.

MEASURING PERFORMANCE

Mr. MEAD. Yes, and the point in mentioning that is that a system that is measuring performance——

Senator SHELBY. Yes.

Mr. MEAD [continuing]. Through measures such as that is destined not to succeed.

FAA causal data do not cover delays or cancellations due to air carrier activities, such as aircraft maintenance, lack of a plane, or lack of a flight crew. In other words, we do not have a complete picture of the data.

And if there is no plane, that flight is going to be delayed, one way or the other. But FAA does not keep track of that.

Now, the airlines do track these causes and it becomes a very complicated task when you——

Senator SHELBY. Why—what does not FAA do it——

Mr. MEAD. I am——

Senator SHELBY [continuing]. Or require them to do it for FAA?

Mr. MEAD. I think they should.

Senator SHELBY. Ms. Garvey, would you get in on that?

Ms. GARVEY. I do not want to interrupt his testimony, but——

Senator SHELBY. That——

Ms. GARVEY [continuing]. We—the rationale for the FAA has always been to focus on those pieces of the system that we can control so that we can improve the operation, but I will wait until Mr. Mead is finished.

Senator SHELBY. Okay.

Ms. GARVEY. But we are doing some—some other things.

Senator SHELBY. Okay.

CONSISTENT AND COMPLETE DATA

Mr. MEAD. The lack of consistent and complete data has only created confusion and finger-pointing. And the traveling public is caught somewhere in between on the delayed or cancelled flight.

The issue boils down—in our view, Mr. Chairman, to what can reasonably be expected of the air traffic control system in airports. And this is both a short- and long-term issue. And there is no silver bullet solution.

But what is feasible in the way of relief can only be addressed if there is a common language between the airlines and the FAA and an agreed upon system for defining the various causes of delays, and tracking the approximate and underlying causes of those delays from both pre-gate departure, all the way to arrival.

And until we do that, it is going to be very difficult to target effective solutions.

We need to know how much of the problem can be fixed in the short- and the long-term by ATC equipment, and how much cannot be fixed by ATC equipment.

DELAYS AND CANCELLATIONS

That will be the guide to solutions, including any necessary adjustments to flight schedules. That is why the AIR–21 provision should be implemented without further delay.

Moving to the highlights of what we found in our delay and cancellation work, FAA identified a 58 percent increase in delays between 1995 and 1999. Flight cancellations grew at an even faster rate than delays, increasing 68 percent over that 5-year period.

Total flight operations increased 8.3 percent. This means, Mr. Chairman, that one in every five commercial flights, 20 percent, roughly 1.1 million were late in arriving with an average delay of almost 50 minutes. Nearly 3 percent of the flights were cancelled in 1999. And if you were on one of those, you were on one of 154,000 flights.

Delays are getting longer. Most delays occur on the ground.

TAXI-OUT TIMES

At the 28 largest U.S. airports, flights experiencing taxi-out times of 1 hour or more increased 130 percent, from about 17,000 in 1995 to 40,000 in 1999.

Flights with taxi-out times of 2, 3 and 4 hours increased by huge margins of 186, 216 and 251 percent respectively. Because some of these flights pushed back from the gate within 15 minutes, they were under the rules considered on-time departures.

FLIGHT TIMES

I also want to point out that the true extent of delays are masked by increases in scheduled flight times. Between 1988 and 1999, the 10 carriers reporting to the Bureau of Transportation Statistics increased their scheduled flight times on over 80 percent of roughly 2,000 domestic routes. And 390 of those routes experienced scheduled flight increases of 10 to 27 minutes on average over the past decades.

The reasons the airlines are doing this is understandable. The schedules are increased to compensate for anticipated longer ground and air times. And the reason I mention this is because the number of arrival delays would have increased by over 25 percent in 1999 if the air carriers' scheduled flight times had remained at the 1988 levels.

We think that measures of the system's performance should consider both the scheduled or built-in delays as well as those delays that occur over and above those that are scheduled.

CUSTOMER COMMITMENT

I would like to move to the customer commitment, sir. Flight problems such as delays and cancellations are the number one air travel complaint.

Customer care and baggage complaints are the next two. Altogether, they comprise about 70 percent of the complaints. The complaints doubled in 1999 over 1998. And they are doubling again this year.

The Internet is partly responsible for this. It is a lot easier to complain today than it was. But I think if people just point to the Internet and say, "Well, that is why," they are doing so at their peril.

I think it is important for everybody to understand what these commitments do and do not do. They address matters such as improved communication, offering the lowest fares available over the phone, and that is an important distinction, timely return of delayed baggage, and allowing reservations to be held or cancelled without penalty.

The commitment, though, does not directly address the underlying sources of consumer dissatisfaction, such as extensive flight delays, baggage not showing up on arrival. The commitment on on-time baggage delivery, really is not on-time baggage delivery; that commitment is to return bags within 24 hours that did not show up on time.

That would—it is not exactly the most artful way of expressing——

Senator SHELBY. It sounds like again they are gaming the system. In other words, they are not really telling the truth in the statistic.

Mr. MEAD. Well, I think they could have described that particular commitment title with greater clarity.

Senator SHELBY. Absolutely.

Mr. MEAD. The commitments also do not address, directly, long check-in lines and high fares in certain markets. In our view, until those factors are addressed, you are going to continue to experience widespread discontent in the system.

What we found in our testing—and our people are going out to the airports and on the airlines, so they are experiencing this firsthand—we found that the airlines are actually making a genuine and clear commitment to paying greater attention to customer service.

But the bottom line results are mixed and the airlines have a long way to go to restore consumer confidence.

NOTIFYING CUSTOMERS OF DELAYS AND CANCELLATIONS

I would like to just mention what we were finding with the two commitments that pertain to delays and then close off. The commitment about notifying customers of known delays and cancellations—we found that for the most part, the airlines were really making a significant effort at ensuring that there would be greater communication between the pilots, between the gate agents and so forth, but we found major room for improvement in the accuracy and reliability and timeliness of what was being communicated.

We found several airlines repeatedly pointing to the air traffic control system as the reason for delays, even in cases of extremely bad weather, crew unavailability, or maintenance problems. In fact, in some cases, we were told the flight was leaving on time, and there was no plane.

The way we checked out these things is we would hear what the gate agent was saying and then our staff would run up to the air traffic control tower to find out exactly what was happening. And we tied together the two stories.

We also found a disconnect between what the airlines are saying in their plans and what they say in their contracts of carriage. The contract of carriage is a legally binding document.

With one exception, all the plans say, "We will provide accommodations for passengers put in an overnight status due to airline operations." Now, the airlines define what is due to airline operations.

But my point is only two airlines say that they will provide overnight accommodation in their contracts of carriage.

Instead, what the contract of carriage says is, "We will do it if the passenger is diverted to another airport." So for those contracts of carriage, in the next 6 months, we would like to see them incorporate more of what is in the plans.

Senator SHELBY. I wonder who reads those.

Mr. MEAD. Well, my staff is reading them because they have to.

Senator SHELBY. Yes. Well, that answers my question.

MEETING CUSTOMER'S NEEDS

Mr. MEAD. The other one is the meeting of a customer's essential needs during long on-aircraft delays. During our initial visits, less than half the airlines had comprehensive customer service contingency plans for dealing with these at all the airports they serve.

They now advise us, and we are checking it out, that they do have them in place. But the provision and the plans use general terms, such as the airline will provide "food," will make "every reasonable effort" when the delay is "for an extended period of time," for an "emergency."

PREPARED STATEMENT

And these terms are obviously not self-defining. So we think the airlines need to do a better job of providing the consumer with a clearer understanding of what to expect.

And I think I will just close off there, sir.

Senator SHELBY. Thank you.

[The statement follows:]

PREPARED STATEMENT OF KENNETH M. MEAD

AIR CARRIER FLIGHT DELAYS AND CUSTOMER SERVICE

Mr. Chairman and Members of the Subcommittee: We appreciate the opportunity to discuss airline flight delays and cancellations, and airline efforts to improve customer service. Concerned over increasing complaints in air travel, compounded by the continued growth in flight delays and cancellations, Congress considered whether to enact a "passenger bill of rights."

Congress, the Department of Transportation (DOT), and the Air Transport Association (ATA) agreed that, for the time being, legislation would not be necessary. Instead, ATA and 14 of its member airlines (Airlines) executed a document on June

17, 1999, known as the Airline Customer Service Commitment. The Commitment includes 12 provisions. Two of these provisions (notifying customers of known delays and meeting customers' essential needs during on-aircraft delays) are in response to the growth in flight delays and cancellations.

The Airlines Commit to:

—1. Offer the lowest fare available
—2. Notify customers of known delays, cancellations, and diversions
—3. On-time baggage delivery
—4. Support an increase in the baggage liability limit
—5. Allow reservations to be held or canceled
—6. Provide prompt ticket refunds
—7. Properly accommodate disabled and special needs passengers
—8. Meet customers' essential needs during long on-aircraft delays
—9. Handle "bumped" passengers with fairness and consistency
—10. Disclose travel itinerary, cancellation policies, frequent flyer rules, and aircraft configuration
—11. Ensure good customer service from code-share partners
—12. Be more responsive to customer complaints

At the request of the Chairman, we reviewed the amount of flight delays occurring in the National Airspace System as well as the systems for tracking delays and cancellations and their causes. The results are in our Report on Air Carrier Flight Delays and Cancellations, which we are submitting for the record. The Airlines cooperated fully with us during our reviews. Today, I would like to address growth in flight delays and cancellations, and our interim results on the Airlines' implementation of the Commitment and Plans.

GROWTH IN AIR CARRIER FLIGHT DELAYS AND CANCELLATIONS

Mr. Chairman, a major finding of our review, and one on which we believe urgent attention is required, is the absence of a system for collecting causal data and reporting a reasonably complete picture of the causes of delays and cancellations from pre-gate departure to arrival. The Wendell H. Ford Aviation Investment and Reform Act for the 21st Century requires such a system, but there has been insufficient progress.

Meanwhile, air carriers blame much of the cause for delays on what they see as an antiquated air traffic control (ATC) system that has failed to keep pace with demand. The Federal Aviation Administration (FAA) points primarily to weather and flight volume. The lack of consistent and complete data has only fueled this debate—with the traveling public experiencing the result of delayed or canceled flights. We found that FAA causal data do not cover delays due to air carrier activities, such as aircraft maintenance, or lack of an aircraft or flight crew. Most of the air carriers maintain their own causal information for internal purposes, but their information is generally not consistent with the information collected by FAA.

The issue boils down to what can reasonably be expected of the ATC system and airports. For those in search of solutions, this is both a short- and long-term issue, and there is no "silver bullet" solution to reducing delays and cancellations. The Airlines do not view scheduling practices as the core problem; it is their expectation that a modern ATC system and airports should be able to handle the load. What is feasible in the way of relief—short- and long-term—can only be addressed with a common language between the Airlines and FAA and an agreed-upon system for tracking the proximate and underlying causes of delays and cancellations from pre-gate departure through all stages of flight. Our major conclusions are summarized below.

—*Flight Delays and Cancellations Have Increased Significantly Since 1995*.—Both the Bureau of Transportation Statistics (BTS) and FAA reported increases in flight delays between 1995 and 1999. However, there is a large variance between BTS and FAA delay totals because they use different systems to define and track delays. BTS tracks only gate departure and arrival of a flight, while FAA tracks the intervening ground and airborne phases.

According to BTS data, delays increased 11 percent (1,863,265 to 2,076,443) during this time period. Likewise, FAA data identified an even larger increase of 58 percent (236,802 to 374,116). During this same period, total flight operations increased 8.3 percent, from approximately 64 million to 69.3 million.

We also found that the number of delays continues to increase in 2000. Overall, there were about 12 percent more FAA-reported delays and over 5 percent more BTS-reported delays during the first 5 months of 2000 than during the same period in 1999.

Flight cancellations between 1995 and 1999 grew at an even faster pace than flight delays, increasing 68 percent (91,905 to 154,311). Some high traffic routes had cancellation rates three to five times higher than the 1999 national average. Increases have continued this year, with the first 5 months of 2000 experiencing over 5 percent more cancellations than in the same period in 1999.

—*Flight Delays Are Also Getting Longer*.—Not only are there more delays, but those occurring are longer. The length of delays reported by BTS and FAA increased 16 to 18 percent, respectively. According to BTS data, the average arrival delay increased to over 50 minutes in 1999 from 42 minutes in 1995. We also found substantial differences among the top 28 airports, with average delay times ranging from 70 minutes at Baltimore to 25 minutes at Las Vegas.

—*Most Delays Occur on the Ground*.—We found that most delays took place on the ground in the form of longer taxi-out and taxi-in times. Our analysis of BTS data found that 82 percent of the increase in gate-to-gate times between 1995 and 1999 was due to longer taxi-out and taxi-in times, with the remaining 18 percent involving longer flight times.

Also at the 28 largest U.S. airports, the number of flights experiencing taxi-out times of 1 hour or more (flights in which the aircraft has departed the gate but remained for extended periods of time on the ground awaiting taking off) increased 130 percent between 1995 and 1999, from 17,164 to 39,523. More significant, at these 28 major airports, the number of flights with taxi-out times of 2, 3, and 4 hours increased by huge percentages of 186, 216 and 251 respectively during the same period. Push-back from the gate within 15 minutes of scheduled departure counts as an on-time departure for BTS reports, even if a flight remains on the taxiway for an hour or more.

—*Lengthening of Scheduled Flight Times Masks True Growth of Delays*.—Between 1988 and 1999, the 10 major air carriers reporting to BTS increased their scheduled flight times on over 80 percent of their domestic routes (1,660 of 2,036 routes). By increasing the schedule time, the actual extent of delays through the system is underreported. For example, the number of arrival delays would have increased by nearly 25 percent in 1999 if the air carriers scheduled flight times had remained at their 1988 levels. We estimate that, from 1988 through 1999, these schedule changes added nearly 130 million minutes of travel time for air passengers.

In an effort to measure the true growth in flight delays and the resulting impact on consumers and air carriers, we developed the Consumer Flight Delay Indicator (CFDI). This indicator calculates the average delay time per flight flown by the 10 major air carriers and takes into account both scheduled and unscheduled delays. Using 1988 as the base year, we found that the CFDI rate in 1999 was 16:18 minutes. This represents a 42 percent increase from 1995 when the CFDI was 11:24 minutes.

—*DOT Lacks a Uniform Methodology for Tracking Delays*.—We found major differences in the methodologies used by FAA and BTS to determine flight delays. These differences can lead to somewhat confusing results. FAA collects data on flight delays via the Operations Network (OPSNET). OPSNET data come from FAA personnel who manually record aircraft that were delayed by more than 15 minutes after coming under FAA's control, i.e., the pilot's request to taxi out. As such, an aircraft could wait an hour or more at the gate or ramp area before requesting clearance to taxi. So long as the flight, once under FAA's control, took off within 15 minutes of the airport's standard taxi-out time, the flight would be considered an on-time departure.

Conversely, the major air carriers submit monthly flight data to BTS. According to BTS, a flight is counted as "on time" if it departed or arrived within 15 minutes of scheduled gate departure and arrival times shown in the airline's reservation system. Using this definition, an aircraft could wait an hour or more on the airport taxiway for takeoff and be reported by BTS as having departed on time if it left the gate within 15 minutes of its scheduled departure.

—*Although Actions Are Underway, Much Work Remains*.—Partly in response to the increase in delays and cancellations as well as the number of complaints, FAA along with representatives of the airline industry conducted an extensive evaluation in 1999 aimed at improving its management of air traffic. As a result of the evaluation, FAA and the industry identified 165 near-term action items to relieve delays including: (1) limiting locally initiated ground stops to 30 minutes; (2) providing estimates to air carriers of the time a ground stop will end

and the cause for this action; and (3) ensuring that local facilities coordinate miles-in-trail restrictions[1] through the National Air Traffic Control System Command Center. According to FAA, most of the action items have been implemented.

FAA also recognizes the need for a common system for tracking delays, cancellations, and their causes. As a result, the agency has been working closely with the major air carriers in developing the Aviation System Performance Metric (ASPM). ASPM, which became operational at 21 airports in April 2000, establishes a uniform set of metrics on which to measure delays during each flight segment, i.e., gate departure, taxi-out, en route, taxi-in, gate arrival, and overall flight time.

FAA officials noted that ASPM will initially be used to help identify and track delays and cancellations as well as measure ATC performance. They also noted their intent to eventually include causal information in ASPM, which will be critical in helping FAA and the air carriers identify areas for improvement, such as changes in traffic management practices, funding for equipment and airport enhancements, and airspace redesign.

—*Causal Data on Flight Delays and Cancellations Are Woefully Incomplete*.—Beyond the methodologies used to determine flight delays, we also found causal data varied significantly-with no one system possessing a complete picture of the causes of flight delays and cancellations. For example, BTS does not collect causal data for delays or cancellations. FAA only collects causal data on delays reported through OPSNET, but maintains no comparable information on cancellations. Moreover, FAA causal codes do not cover delays due to air carrier activities, such as aircraft maintenance, boarding of passengers, or fueling. While most of the air carriers maintain causal information for internal purposes on both delays and cancellations, those causes are associated primarily with gate departure delays, and generally are not consistent with the causal information collected by FAA.

PRELIMINARY RESULTS ON IMPLEMENTATION OF THE AIRLINES' COMMITMENT AND PLANS ARE MIXED

The Growth in Delays and Cancellations Has Led to Increases in Customer Dissatisfaction With Air Carrier Customer Service.—The Airlines are at the 6-month point in implementing their Plans designed to restore and improve customer service. We reported our preliminary results in our Interim Report on Airline Customer Service Commitment.[2]

—*The Commitment Does Not Address Underlying Reasons for Customer Dissatisfaction*.—The Commitment addresses such matters as improved communication with passengers, quoting the lowest available airfare, timely return of misrouted or delayed baggage, allowing reservations to be held or canceled without penalty, providing prompt ticket refunds, and meeting passengers' essential needs during long on-board delays. However, the Commitment does not directly address underlying reasons for customer dissatisfaction, such as extensive flight delays, baggage not showing up on arrival, long check-in lines, and high fares in certain markets. In our opinion, until these areas are effectively addressed by the Airlines, FAA, and others, there will continue to be discontent among air travelers.

—*Airlines Have a Long Way to Go to Restore Customer Confidence*.—In our initial observations and testing, we found the Airlines are making a clear and genuine effort at strengthening the attention paid to customer service, but bottom-line results are mixed, and the Airlines have a long way to go to restore customer confidence.

For instance, at least 2 of the 12 provisions cover airline service when flights are delayed or canceled. These two provisions address notifying customers of known delays, cancellations and diversions, and meeting customers' essential needs during long on-aircraft delays. We found the Airlines were making a significant effort, both at the airport and on-board aircraft, to improve the frequency of communication with customers about delays and cancellations. These improvements include investments in various communication technologies and media as well as more frequent announcements to customers. However, we also found major room for improvement in the accuracy, reliability, and timeliness

[1] Miles-in-trail is an ATC tool that intentionally paces traffic by increasing spacing between aircraft to keep volume at manageable levels. This spacing between aircraft is different from FAA's safety separation standards requirement of 5 nautical miles laterally or 2,000 feet in altitude, in sectors of high-altitude traffic.

[2] Report Number AV–2000–102 issued June 27, 2000.

of the Airlines' communications to customers about the status of flights. For example, several Airlines pointed to the air traffic control system as the reason for delays, even in cases of extremely bad weather, crew unavailability, or maintenance problems.

We also found a disconnect between what the Airlines specified in their Plans and what is in their contracts of carriage. With one exception, all the Plans specify that the Airlines will provide accommodations for passengers put in an overnight status due to Airline operations. However only two Airlines explicitly provide for this in their contracts of carriage. Most Airlines' contracts of carriage only provide for accommodations if the passenger is diverted to another airport and put in an overnight status at that other airport. It is unclear if the passengers' rights to the services provided in the Airlines' Plans are enforceable if those rights are not specified in the Airlines' contracts of carriage.

Likewise, accommodating passengers during on-aircraft delays is a major challenge faced by the Airlines. We found that less than half the Airlines had comprehensive customer service contingency plans in place, at all the airports they served, for handling delays due to severe weather or Airline service irregularities (e.g., unscheduled equipment maintenance or crew shortages). This provision also does not specify in any detail the efforts that will be made to get passengers off the aircraft when delayed for extended periods, either before departure or after arrival. The provision uses general terms such as "food," "every reasonable effort," "for an extended period of time," or "emergency." These terms should be clearly defined to provide the passenger with a clear understanding of what to expect.

Our detailed observations on the Airline's efforts to implement the Commitment and needed initiatives to enhance the success of Customer Service Plans are included later in this testimony.

BACKGROUND

FAA estimates that delays to commercial aviation cost the airlines over $3 billion a year and projects that delays throughout the system will continue to increase as the demand for passenger travel rises. Moreover, passengers are directly affected by the inconvenience of delays in terms of missed flight connections, missed business meetings, and lost personal time. Over the last year, the news media reported a growing debate on flight delays and their causes. One large U.S. airline claimed that it lost as much as $120 million in the first half of 1999 because of air traffic control (ATC) delays and canceled flights. FAA contended that few delays resulted from ATC equipment problems, and attributed the bulk of all delays to poor weather.

Domestic air carriers[3] that account for at least one percent of domestic scheduled passenger revenues submit monthly Airline Service Quality Performance Reports to the DOT's Bureau of Transportation Statistics (BTS). For this report, a flight is counted as "on time" if it departed or arrived within 15 minutes of scheduled gate departure and arrival times shown in the airline's reservation system.

FAA collects data on flight delays via the Operations Network (OPSNET). OPSNET data come from observations by FAA personnel who manually record aircraft that were delayed for 15 minutes or more after coming under FAA's control, i.e., the pilot's request to taxi out. Delays attributable to an air carrier's operations, such as aircraft and flight crew problems, are not included in OPSNET, nor are canceled flights (regardless of the reason).

A key reason for differing data maintained by FAA and BTS is in how each uses the information it collects. For FAA, delay information serves to measure system-wide ATC performance as well as to identify areas for improvement. For BTS, measuring delays (and subsequent ranking of air carriers by on-time arrival performance) serves as a source of air travel information to consumers and helps ensure more accurate reporting of flight schedules by the air carriers.

Flight Delays and Cancellations Have Increased Significantly

Both BTS and FAA reported increases in all types of flight delays between 1995 and 1999. For instance, according to BTS data, delays increased 11 percent (1,863,265 to 2,076,443) during this time period. Likewise, FAA data identified an even larger increase of 58 percent (236,802 to 374,116). Figure 1 illustrates FAA-reported delays from 1995 to 1999. During this same period, both flight operations

[3] Those 10 reporting air carriers are Alaska Airlines, America West Airlines, American Airlines, Continental Airlines, Delta Air Lines, Northwest Airlines, Southwest Airlines, Trans World Airlines, United Airlines, and U.S. Airways.

and enplanements were increasing, on average, 2 and 4 percent per year, respectively.

FIGURE 1.—*Growth in FAA-Reported Flight Delays*

Year	*No. of delays*
1995	236,802
1996	271,507
1997	245,259
1998	306,234
1999	374,116

We found that the number of delays continues to increase in 2000. Overall, there were about 12 percent more FAA-reported delays and over 5 percent more BTS-reported delays during the first 5 months of 2000 than during the same period in 1999. The number of canceled flights the 10 major air carriers reported to BTS increased 68 percent, from 91,905 to 154,311, between 1995 and 1999. Increases have continued this year, with the first 5 months of 2000 experiencing over 5 percent more cancellations than the same period in 1999.

Length of Delays Also Increased, Ranging From 16 to 18 Percent

Not only were there more delays in 1999 than in 1995, but the length of delays also increased. Table 1 lists the average duration of FAA OPSNET delays (i.e., departure, en route, and arrival) and BTS arrival delays from 1995 to 1999.[4] Overall, the length of FAA OPSNET delays increased 16 percent, while BTS arrival delays increased 18 percent.

TABLE 1.—DURATION OF FAA OPSNET AND BTS ARRIVAL DELAYS

[In minutes]

Year	FAA OPSNET Delays	BTS Arrival Delays
1995	37:34	42:41
1996	40:41	46:12
1997	37:45	44:40
1998	41:04	49:19
1999	43:30	50:26
Percent change 1995–99	16	18

Most Delays Occur on the Ground During Departure

We found that most delays took place on the ground. FAA's analysis of flights to and from 55 major U.S. airports found that ground delays represented approximately 83 percent of the total delay time in 1999. This percentage is supported by our own analysis of BTS data. Specifically, we determined that 82 percent of the increase in gate-to-gate[5] times between 1995 and 1999 was due to longer taxi-out and taxi-in times, with the remaining 18 percent involving longer en route times. This represents a noticeable shift from 1996, when only 60 percent of the increase in gate-to-gate times (over 1995) was due to longer ground times.

We also found that the number of flights that experienced taxi-out times of 1 hour or more (e.g., the aircraft departed the gate but remained for extended periods of time on the ground awaiting takeoff) had increased 130 percent, as noted in Figure 2. Of even greater concern for passengers is the number of flights with taxi-out times of 2, 3, or 4 hours, which increased at an even faster pace, i.e., 186, 216, and 251 percent, respectively, between 1995 and 1999.

FIGURE 2.—*Flights with Taxi-Out Times of 1 Hour or More at 28 Largest Airports*

Year	*No. of flights*
1995	17,164
1996	25,417
1997	22,535

[4] These averages are based on delays of 15 minutes or more, since 15 minutes is the cut-off point used by both BTS and FAA in determining a delay.

[5] Also referred to as "block" time, gate-to-gate time covers the period between gate departure and gate arrival.

Year	No. of flights
1998	29,970
1999	39,523

Actual Extent of Delays Is Much Greater, and Is Masked By Increases in Scheduled Flight Times

To compensate for longer ground and air times, the air carriers have increased their flight schedules on nearly 82 percent (1,660 of 2,036) of domestic routes between 1988[6] and 1999. Overall, we identified 390 domestic routes, comprising 793,586 flights in 1999, which experienced schedule increases of approximately 10 to 27 minutes (on average) over the last 11 years. By increasing their scheduled flight times, however, the actual extent of delays throughout the system—as tracked by BTS—is underreported. For example, the number of arrival delays reported to BTS would have been nearly 25 percent higher in 1999 if flight schedules had remained at their 1988 levels. Overall, we calculate that scheduled delays added nearly 130 million minutes of travel time for air passengers from 1988 through 1999.

In an effort to measure the actual growth in flight delays, taking into account both scheduled and unscheduled delays, we developed the Consumer Flight Delay Indicator (CFDI). This indicator calculates the average delay time per flight flown by the 10 major air carriers. Using 1988 as the base year, we found that the CFDI rate in 1999 was 16:18 minutes.[7] This represents a 42 percent increase from 1995, when the CFDI was 11:24 minutes, as indicated by Figure 3.

FIGURE 3.—*OIG's Consumer Flight Delay Indicator*

[1995–99 (BasedYear 1988)]

Year	Minutes
1995	11:24
1996	14:30
1997	13:18
1998	14:30
1999	16:18

DOT Lacks a Uniform Methodology for Tracking Delays

We found major differences in the methodologies used by FAA and BTS to record and track flight delays. As a consequence, FAA and BTS differ as to what they consider a delay and how such delays are calculated. For example, FAA tracks delays on the taxiway and runway (departure) and airborne (en route and arrival). BTS tracks delays at the departure or arrival gates. The two agencies also have little in common with respect to how they calculate delays. As a consequence, these differing methodologies can lead to somewhat confusing (if not misleading) results as shown in the two examples.

Example 1.—On November 2, 1999, United Airlines flight 645 from Newark to O'Hare left the gate 68 minutes after the scheduled departure time due to mechanical problems. Because this delay took place at the gate, it incurred a departure delay as defined by BTS. Once repaired, however, the flight took off within 24 minutes of receiving FAA's clearance to taxi. Because the total time period between the request for taxi and wheels off did not exceed the allotted taxi-out time of 29 minutes at Newark, FAA did not record a departure delay.

Example 2.—On November 1, 1999, American Airlines flight 1599 from Newark to O'Hare departed the gate at the scheduled time. As such, it achieved an on-time departure as defined by BTS. Because of an FAA ground delay, the aircraft remained in the ramp/taxiway an additional 113 minutes before takeoff. FAA, therefore, recorded a departure delay since the elapsed period far exceeded Newark's allotted taxi-out time of 29 minutes.

For instance, FAA calculates a delayed departure as the difference between the time a pilot requests FAA clearance to taxi and the time an aircraft's wheels lift off the runway, minus the airport's standard unimpeded taxi-out time. In comparison, BTS calculates a delayed departure as the difference between scheduled and actual departure time from the gate.

Causal Data on Flight Delays and Cancellations Are Incomplete

There is significant disagreement within the aviation community as to the causes of flight delays and cancellations. Air carriers, for example, blame FAA and weather for most delays. In contrast, FAA points to weather and flight volume as the main

[6] 1988 is the first complete year of data from the 10 major air carriers.

[7] We calculated that 10 of 28 major U.S. airports had CFDIs equal to or greater than 20 minutes in 1999.

factors. Moreover, the lack of consistent and complete data on the causes of delays and cancellations has only fueled this debate. In conducting our audit, we found no system that provides a complete picture of the causes of flight delays and cancellations. FAA causal codes do not cover delays due to air carrier activities, such as aircraft maintenance, boarding of passengers, or fueling. While most of the carriers maintain causal information for internal purposes on both delays and cancellations, those causes are associated primarily with gate departure delays, and generally are not consistent with the causal information collected by FAA. Until this inconsistency is resolved, FAA and the air carriers will continue to blame one another, and the decision-makers' ability to address the underlying causes such as runway capacity, air traffic control equipment and procedures, weather, and airline scheduling practices will be hindered.

Increase in Flight Delays and Cancellations Fuel Customer Dissatisfaction

Over the last several years, DOT has ranked flight problems (delays, cancellations and missed connections) as the number one air traveler complaint, with customer care (such as the treatment of delayed passengers) and baggage complaints ranked as either number two or number three. As depicted in Figure 4, 1999 data show that these three types of complaints account for nearly 70 percent of all complaints received by DOT against U.S. and foreign air carriers. This trend continues for the first 5 months of 2000, with flight problems, customer care and baggage complaints accounting for over 70 percent of all complaints received by DOT against U.S. and foreign air carriers.

FIGURE 4.—*Air Travel Consumer Report*

[1999 Complaints]

Complaints	*Percent*
Flight Problems	35
Customer care	20
Baggage	14
Reservations, ticketing, and boarding	8
Refunds	7
Other	16

Preliminary Results on Implementation of the Commitment and Plans Are Mixed

The Commitment and the Airlines' Plans for implementing it were essentially a commitment to place substantially greater emphasis, attention and resources on customer service. The Airlines realized they needed to improve the way they treat passengers and that good customer service begins with the successful execution of, and continuous improvement to, existing customer service policies and procedures, programs and plans, as well as systems and technologies.

In developing the Commitment, the Airlines included two provisions that constituted new policy. The provision to either hold a reservation without payment for 24 hours or (at the Airline's choice) cancel a paid reservation within 24 hours without penalty is a new service the Airlines are providing. Another new provision was to support the increase in the baggage liability limit from $1,250 to $2,500, which became effective January 18, 2000.

As for the remaining 10 provisions in the Commitment, the Airlines agreed to focus on better execution of customer service policies and procedures, many required by law or regulation, required under the Airlines' contracts of carriage, or part of Airline operating policy. A few of these provisions had subsets that provided new policies such as notifying customers in a timely manner of the best available information regarding known delays, cancellations and diversions; making every reasonable effort to return checked bags within 24 hours; issuing an annual report on frequent flyer redemption programs; and providing information regarding aircraft configuration (seat width and legroom).

Our interim results are based on visits to the Airlines' corporate headquarters and other key facilities, and review of Airline policies and procedures before and after implementation of the Commitment. This allowed us to evaluate what impact the formal Commitment had on the Airlines' customer service. We also reviewed the Airlines' Plans and contracts of carriage to determine whether the provisions of the Commitment have been incorporated into these documents. To date, we have visited over 30 domestic airports to observe and test portions of the individual Airlines' Plans that are in place. We are continuing to test the effectiveness of the Commitment and will provide our results in our final report. To date, our preliminary results have identified areas that appear to be working well, as well as areas for improvement, as illustrated in the following examples.

—*Offer the lowest fare available*.—The Airlines agreed to offer, through their telephone reservation systems, the lowest fare available for which the customer is eligible. However, Airlines did not commit to guaranteeing the customer that the quoted fare is the lowest fare the Airline has to offer. There may be lower fares available through the Airlines' Internet sites that are not available through the Airlines' telephone reservation systems.

We found six Airlines enhanced the provision by (1) offering the lowest fare for reservations made at their city ticket offices and airport customer service counters, not just through the Airlines' telephone reservation systems; or (2) requiring their reservation agents to query customers about the flexibility of their itinerary in terms of travel dates, airports and travel times to find the lowest fare available; or (3) notifying the customer through an on-hold message that lower fares may be available through other distribution sources and during different travel times.

Ongoing testing of this provision shows that Airline telephone agents were usually offering the lowest available fare for which we were eligible, but there were a sufficient number of exceptions to this that it is an area to which the Airlines should pay special attention. The problems we identified were not deliberate on the part of the Airlines, but were due to employees not following established procedures.

—*Notify customers of known delays, cancellations, and diversions*.—For the most part, we found the Airlines were making a significant effort, both at the airport and on-board aircraft, to improve the frequency of communication with customers about delays and cancellations. These improvements include investments in various communication technologies and media as well as more frequent announcements to customers. For example, six airlines have procedures in place to contact passengers at their home, work, pager, or cellular telephone number about known delays and cancellations. However, we also found major room for improvement in the accuracy, reliability, and timeliness of the Airlines' communications to customers about the status of flights. For example, several Airlines pointed to the air traffic control system as the reason for delays, even in cases of extremely bad weather, crew unavailability, or maintenance problems.

We also found flight monitors and gate displays in the boarding areas showed the flights as on-time although, at the time of the flight, it was evident there would be a delay because (1) there was no aircraft at the gate, or (2) the flight was scheduled to leave in 5 minutes and passenger boarding had not begun. During some of our tests, when queried, the gate agent told us the flight was scheduled to leave on-time when in fact, we knew from FAA air traffic control that it was delayed.

The Airlines and FAA must move beyond finger-pointing, and work towards greater cooperation in identifying and addressing the causes for flight delays and cancellations. FAA and the carriers need to move forward and establish a common framework for documenting and identifying the causes of delays and cancellations. The need for this was recently demonstrated by a lengthy delay at a major U.S. airport when some passengers were on-board aircraft from 4 to 8 hours. FAA and the Airline have different views on what happened and why. This illustrates the need for better communications and systems for documenting the cause of delays.

We also found a disconnect between what the Airlines specified in their Plans and what is in their contracts of carriage. With one exception, all the Plans specify that the Airlines will provide accommodations for passengers put in an overnight status due to Airline operations. However only two Airlines explicitly provide for this in their contracts of carriage. Most Airlines' contracts of carriage only provide for accommodations if the passenger is diverted to another airport and put in an overnight status at that other airport. It is unclear if the passengers' rights to the services provided in the Airlines' Plans are enforceable if those rights are not specified in the Airlines' contracts of carriage.

We suggested the Airlines improve the lines of communication and streamline the flow of accurate and reliable information between (1) FAA and the Airlines' Operations Control Centers, and (2) the Airlines' Operations Control Centers and frontline personnel who deal directly with passengers. We also suggested that the Airlines consider making their contracts of carriage consistent with their Plans to clarify the customers' rights when put in an overnight situation due to delays, cancellations, or diversions.

—*On-time baggage delivery*.—Passengers expect to find their checked baggage upon arrival at their destination airports, but this provision actually deals with the delivery of misrouted or delayed baggage. The Airlines committed to return

the misrouted or delayed bag to the passenger "within 24 hours." We have found examples where Airlines have invested in advanced baggage scanning technologies to facilitate the return of baggage or increased staff resources for processing claims. However, we also found that the Airlines were not consistent in their Plans when defining what constituted "within 24 hours." For instance, some Airlines started the 24-hour clock when a passenger filed a missing bag claim and others only after the bag arrived at the destination airport.

The Airlines should consider committing to returning unclaimed and lost checked baggage to customers within 24 hours of receipt of a customer's claim. The filing of a claim is when a customer would reasonably expect the 24 hours to begin. Also, those Airlines that have not already done so should consider providing a toll-free telephone number for customers to call to check on the status of their bags.

—*Allow reservations to be held or canceled*.—This is a completely new customer service commitment, which allows the customer either to hold a telephone reservation without payment for 24 hours or (at the Airline's option) cancel a paid reservation without penalty for up to 24 hours. This provision should be very popular with passengers who book nonrefundable tickets, because it allows customers to check for lower fares and time to coordinate their travel without losing a quoted fare.

Our ongoing testing shows that, with a few exceptions, the Airlines were living up to this commitment in practice. However, where a ticket purchase was required, the reservation agents typically did not tell us that we could receive a full refund if the reservation was canceled within 24 hours. Therefore, we suggested that the Airlines requiring a ticket purchase affirmatively notify passengers that if they cancel the reservation within 24 hours they can receive a full refund without a penalty, even on otherwise nonrefundable tickets.

—*Provide prompt ticket refunds*.—By agreeing to this provision, the Airlines have, in essence, agreed to comply with existing Federal regulations and requirements. The 7-day refund requirement for credit card purchases has been in effect for nearly 20 years and is governed by Federal regulations. The 20-day refund requirement for cash purchases has been in effect for over 16 years. With the exception of one Airline, our ongoing testing did not show compliance problems with this provision.

—*Meet customers' essential needs during long on-aircraft delays*.—During our initial visits to the Airlines, less than half had comprehensive customer service contingency plans in place for handling extended delays on-board aircraft at all the airports they served. Subsequent to our initial visits, the Airlines have all stated that comprehensive customer service contingency plans are in place for addressing delays, cancellations and diversions. Over the next several months, at the airports we visit, we will determine whether the (1) Airlines' customer service contingency plans are in place, (2) Airlines' customer service personnel are knowledgeable of contingency plan procedures, and (3) contingency plans have been coordinated with the local airport authorities and FAA.

This provision also does not specify in any detail the efforts that will be made to get passengers off the aircraft when delayed for extended periods, either before departure or after arrival. The provision uses general terms such as "food," "every reasonable effort," "for an extended period of time," or "emergency." These terms should be clearly defined to provide the passenger with a clear understanding of what to expect.

We have found examples where Airlines have invested in air stairs for deplaning passengers when an aircraft is delayed on the ground but does not have access to a terminal gate; secured additional food and beverage supplies for service at the departure gates or on-board flights experiencing extended delays; or made arrangements with medical consulting services to resolve medical emergencies that occur on-board an aircraft.

—*Handle "bumped" passengers with fairness and consistency*.—The requirement that the Airlines establish and disclose to the customer policies and procedures regarding denied boardings has been in effect for over 17 years. One critical element of disclosure is the Airlines' check-in time requirements that passengers must meet in order to avoid being "bumped." This is important because the last passenger to check in is generally the first to be denied a seat if a flight is oversold.

We found several inconsistencies and ambiguities between the check-in times identified in the Airlines' Plans, and those identified on the Airlines' contracts of carriage, ticket jackets, or other written instruments, such as the customer's receipt and itinerary for electronic tickets. For example, in its contract of carriage, one Airline requires passengers to check in 10 minutes prior to the

flight's scheduled departure, but on the customer's receipt and itinerary for electronic tickets, the check-in time states 20 minutes prior to the flight's scheduled departure, making it unclear to passengers which check-in time must be met in order to avoid losing their seats and being "bumped" from the flight without compensation.

—*Be more responsive to customer complaints*.—The provision requires the Airlines to respond to complaints within 60 days; it does not require resolution of the complaint within the 60-day period, nor that when resolved, the disposition will be satisfactory to the customer. Our testing of this provision found the Airlines were responding to written complaints in accordance with their internal policies, generally less than 60 days. In addition, the replies we reviewed were responsive to the customer complaint and not merely an acknowledgement that the complaint had been received.

Airline Performance Measurement Systems and Non-Airline-Employee Training Are Needed

A key to the success of the Plans is the need for each Airline to have a credible tracking system for compliance with its Plan, buttressed by performance goals and measures. The Airlines also need to train non-Airline employees on customer service issues contained in the Plans, since these individuals are often mistaken for Airline employees.

The Airlines need to have performance measurement systems in place to ensure the success of the Commitment and Plans. Therefore, the success of the Customer Service Plans is dependent upon each Airline having a tracking system for compliance with each provision and the implementing Plan. We found that most of the Airlines originally did not have such a system in place, but we received assurances that the needed systems would be established.

In our work between now and December, we intend to determine whether the Airlines have followed through on their assurances and these performance measurement systems are in place. The expectation, for example, is that each Airline will have in place a tracking system to ensure the lowest eligible fare is offered, that misrouted and delayed baggage is returned within 24 hours, that refunds are paid within the requisite timeframe, and that communication systems for advising passengers of flight status are working properly, and generating reliable and timely information. So far, however, our testing has shown that most of the Airlines have come up short in putting a tracking system in place to ensure that misrouted and delayed baggage is returned to the passenger within 24 hours.

Another area the Airlines need to address to improve customer service is the training of non-Airline employees who interact with customers at the airport such as skycaps, security screeners or wheelchair providers. The Airlines must ensure non-Airline employees who interact with their passengers are adequately trained on the Airlines' Plans, policies and procedures for customer service.

When these personnel perform customer service functions covered directly by the Airlines' Commitment, the public cannot reasonably be expected to differentiate between those who work for the Airlines and those who do not. Therefore, it is critical to the success of the Commitment and Plans for these personnel to be properly trained. However, 5 of the 14 Airlines told us they did not intend to train non-airline personnel on their Plans' procedures. This is unfortunate. For example, it is critical that the Airlines ensure that non-Airline personnel performing passenger security screening service on behalf of the Airlines understand the Airlines' policies and procedures in their Plans for accommodating persons with disabilities.

The Terms in the Airlines' Contracts of Carriage Can Be More Restrictive Than the Terms in Their Plans

The Commitment and the Airlines' Plans, while conveying promises of customer service standards, do not necessarily translate into legally enforceable passenger rights. Rather, each air carrier has an underlying contract of carriage which, under Federal regulations, provides the terms and conditions of passenger rights and air carrier liabilities. The contract of carriage is legally binding between the air carrier and the passenger.

Because of their clear enforceability, the Airlines' contracts of carriage have become an important issue in the customer service debate. Our results indicate that, in general, the Airlines have not modified their contracts of carriage to reflect all items in their Plans. Although 1 Airline incorporated its Plan in its entirety into the contract of carriage, 3 Airlines (as of April 20, 2000) have not changed their contracts of carriage at all since they agreed to the Commitment, and the remaining 10 Airlines have changed their contracts of carriage to some extent. This means, for example, that the provisions for returning misrouted baggage within 24 hours and

holding a reservation for 24 hours without payment are not in some contracts of carriage.

At present, it remains uncertain whether an Airline's Plan is binding and enforceable on the Airline. In fact, one Airline, in its Plan, has stated that the Plan does not create contractual or legal rights. To resolve this question, the Airlines could incorporate their Plans in their contracts of carriage. However, based on our results thus far, we are concerned that, without direction to the contrary, this would leave open the possibility that the contracts of carriage may be more restrictive to the consumer than envisioned in the Commitment or the Plans.

In some cases, we found the modifications made to the contracts of carriage included restrictions not found in the Commitment or the Plans. For example:

—One Airline, in its Plan, states that it would accommodate passengers required to stay overnight for delays and cancellations caused by the Airline's operations. However, in its contract of carriage the terms are more limited—the Airline provides accommodations if the passenger is diverted to another airport and put in an overnight status at the other airport.

—One Airline, in modifying its contract of carriage to implement the provision to hold a reservation without payment for 24 hours, limited the benefit to passengers calling from the United States for travel within the United States. However, the Commitment does not make this distinction.

Customer service is likely to become more of a competitive market force as air carriers strengthen and implement plans to provide better service. Over time, where there is competition in the air markets served, measures to improve customer service should serve as a catalyst for other Airlines to introduce initiatives to improve their customer service in order to remain competitive. However, inclusion of the Plans' provisions in the Airlines' contracts of carriage will become more important if an environment develops where there is less competitive pressure to maintain or improve customer service.

Implications for DOT's Capacity to Oversee and Enforce Air Carrier Customers' Rights

DOT is congressionally mandated to oversee and enforce air travel consumer protection requirements, some of which are covered by the Commitment, and the Airlines' Plans and contracts of carriage. These include compensation rules for bumped passengers, rules governing the accommodation of disabled air travelers, ticket refund provisions, and baggage liability requirements. The Office of the Assistant General Counsel for Aviation Enforcement and Proceedings, including its Aviation Consumer Protection Division, carries out this mission. This office is also responsible for enforcing other aviation economic requirements, such as legal issues that arise regarding air carrier fitness determinations and competition.

DOT, in preparing and justifying budget requests for this office, and Congress, in reviewing those requests, should look closely at this office's capacity to fulfill its mission and be responsive in a timely way to consumer complaints. In 1985, this office had a staff of 40; in 1995, it was down to 20; and by 2000, it had a staff of 17 to oversee and enforce aviation consumer protection rules as well as carry out its other responsibilities.

In fact, staffing has declined during a period of air traffic growth, complaints have increased from 7,665 in 1997 to 20,495[8] in 1999, additional requirements have been established (such as the Air Carrier Access Act and the Aviation Disaster Family Assistance Act), and recently, the Commitment emerged as an important element in protecting passenger rights. An issue that office will face soon is whether policies contained in the Commitment and the Airlines' Plans are enforceable if they are not also contained in the Airlines' contracts of carriage.

We believe there is cause for concern whether the oversight and enforcement expectations for the Office of Aviation Enforcement and Proceedings significantly exceed the office's capacity to handle the workload in a responsive manner.

Although Actions Are Underway, Much Work Remains

Partly in response to the increase in delays and cancellations as well as the number of complaints, FAA along with representatives of the airline industry conducted an extensive evaluation in 1999 aimed at improving its management of air traffic. As a result of the evaluation, FAA and the industry identified 165 near-term action items to relieve delays, including: (1) limiting locally initiated ground stops to 30 minutes; (2) providing estimates to air carriers of the time a ground stop will end and the cause for this action; and (3) ensuring that local facilities coordinate miles-

[8] Total aviation consumer complaints filed with DOT for the entire industry (U.S. airlines, foreign airlines, tour operators, etc.).

in-trail restrictions[9] through the National Air Traffic Control System Command Center. According to FAA, most of the action items have been implemented.

FAA's evaluation also spurred a number of other initiatives. For example, FAA is deploying several traffic management tools, including the Flight Schedule Monitor, Collaborative Convective Forecast Product, and Departure Spacing Program. FAA has also established a web site (www.fly.faa.gov) that provides consumers real-time information on air carrier delays at the Nation's 40 largest airports. The web site is also linked to other information sources, such as the status of the National Airspace System, which shows all the ground delays and stops FAA has in place across the Nation at that time.

FAA also recognizes the need for a common system for tracking delays, cancellations, and their causes. As a result, the agency has been working with the major air carriers in developing the Aviation System Performance Metric (ASPM). ASPM, which became operational in April 2000, establishes a uniform set of metrics on which to measure delays during each flight segment, i.e., gate departure, taxi-out, en route, taxi-in, gate arrival, and overall flight time. ASPM also provides FAA and the participating air carriers with next day reports via the Internet on delays occurring at individual airports, on routes and flights, and within the overall system. FAA officials noted that ASPM will initially be used to help identify and track delays and cancellations as well as measure ATC performance. They also noted their intent to eventually include causal information in ASPM, which will be critical in helping FAA and the air carriers identify areas for improvement, such as changes in traffic management practices, funding for equipment and airport enhancements, and airspace redesign.

Likewise, the need for good causal data was recently reinforced by Congress in The Wendell H. Ford Aviation Investment and Reform Act for the 21st Century. This Act directs the Secretary of Transportation to modify existing regulations governing air carrier data submissions to DOT ". . . to disclose more fully to the public the nature and source of delays and cancellations experienced by air travelers." The Act also requires the establishment of a task force (including officials of FAA, air carriers, and consumer groups) to develop categories for reporting causal information on flight delays and cancellations.

Notwithstanding these efforts, much work remains to be done if delays and cancellations are to be addressed in a meaningful way. A good starting point is the development of a uniform system through which all components of DOT and the air carriers will be able to track flight delays and cancellations as well as measure ATC performance. In addition to this system, more comprehensive information is needed on the various causes of flight delays and cancellations not just those currently recorded by FAA or the air carriers. Finally, the Department needs to reassess the information it provides consumers, especially in the area of departure delays. The current emphasis on gate departure and arrival delays does not reflect the full extent of delays, much of which is occurring on the ground in the form of longer taxi-out times or is being underreported due to expanded flight schedules.

The issues are complex and there are no easy or quick solutions. The long-term solutions for enhancing capacity and improving customer service involve a number of steps including getting better data for decision makers to use in improving the use of our airspace, making more efficient use of existing and new runways, and exploring alternative airline scheduling practices.

Mr. Chairman, this concludes my statement. I would be happy to answer any questions you might have.

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[9] Miles-in-trail is an ATC tool that intentionally paces traffic by increasing spacing between aircraft to keep volume at manageable levels. This spacing between aircraft should not be confused with the FAA safety separation standards requirement of 5 nautical miles laterally or 2,000 feet in altitude, in sectors of high-altitude traffic.

NONDEPARTMENTAL WITNESS

STATEMENT OF EDWARD KRAGH, NEWARK INTERNATIONAL AIRPORT AIR TRAFFIC CONTROLLER, SECRETARY, NEWARK LOCAL, NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION

Senator SHELBY. Mr. Edward Kragh.

Mr. KRAGH. Good morning, Chairman Shelby, Senator Lautenberg, members of the Committee. Thanks for the opportunity to testify this morning.

My name is Ed Kragh. And I am a controller at Newark Airport. I am also the Secretary of NATCA at Newark. And the NATCA is the exclusive representative of over 15,000 air traffic controllers serving the FAA, Department of Defense and the private sector.

AIRLINE DELAYS

Airline delays, as we all know, are at an all-time high. Passenger frustration is over the top.

And predictably when something goes wrong, the finger pointing, as you mentioned, blame game begins. To that end, the airlines have embarked on a well-financed campaign of misinformation blaming air traffic control for their delays.

Everybody has said today, it is unproductive and unfair for one segment of the aviation industry to place responsibility entirely on another.

It is simply untrue to say that air traffic control is primarily at fault for the hundreds of thousands of delays each year.

Safety is the controller's sole function. This should not be compromised to accommodate more passengers, more flights, or more profits for the airlines.

We go to enormous lengths to personally ensure uneventful passage for millions of flyers each year. Controllers do not have an incentive to delay or hinder air traffic. Our motivation is to move aircraft as safely and efficiently as possible.

The longer a delayed aircraft is in our airspace, or for myself at the tower, occupies concrete on the ground, the more difficult our jobs become.

The sole function of controllers is to ensure the safety of the flying public. And this should not be compromised to accommodate more passengers, more flights or more profits.

We are talking about delays. And delays represent a multi-faceted problem. They must be treated as a comprehensive, ongoing circumstance that offers no single or easy solution.

For the obvious contributors to delays are heavy demands, which we see in the summer time increases; and scheduling decisions by airlines, which exceed airport capacity; bad weather; implementation of new controller equipment; and an antiquated system.

CROWDED SKIES

Let us talk about our crowded skies. Our domestic air traffic control system is the largest, most complex and demanding in the world. It is also the safest. And this is no doubt due in large measure to the dedication and professionalism of the controllers workforce.

Today, we are under extreme pressure to squeeze more planes into an already congested airspace.

AIRPORT DELAYS

Newark Airport has had the dubious distinction, as Senator Lautenberg mentioned, of suffering the most air traffic delays of any airport—my figures show it was 6 of the last 7 years. I believe you—you stated that it was 9 of the last 12 years—nothing that we are particularly proud of.

Yet during the same period we speak of, Newark is only ranked from the 15th to the 20th busiest facility in the country. We will likely suffer more delays this year than Dallas/Fort Worth, Chicago O'Hare or Atlanta International, each of which will handle almost double the amount of operations at Newark.

This begs the question, why is Newark number one? And the answer is simply airport capacity.

Any airport's capacity to handle air traffic is a function of its size, the layout of the runways, the air traffic patterns for arrivals and departures and the time frame in which a surge of traffic or traffic peaks must be dealt with by controllers, due to airline scheduling.

By comparison with other major airports, Newark is small. Chicago O'Hare has over 62,000 feet of available runway; Newark, only about 27,000 feet.

Chicago has about 900,000 operations annually; Newark approximately 463,000. Newark is bound on all sides by major highways, railroads and the Newark Bay, making further airport expansion a daunting proposition.

A second reason we are speaking about delays is unrealistic hub scheduling. The inefficient hub and spoke system used by airlines to schedule flights is a major source of delays.

Flight departure and arrival scheduling is at the sole discretion and control of the airlines, not Congress, not the FAA, and certainly not air traffic controllers.

Airlines want to reduce operating costs and maximize revenue, without regard for other airlines' schedules already slated for prime times, terminal air space or airport capacity.

This past Sunday's the last shift that I worked before coming down here at Newark Airport was a beautiful, sunny day. And during the peak departure time of—between 6 and 7 p.m., there were about 25 departure delays.

Weather conditions, as I mentioned, were perfect. There were no equipment problems. Yet the airline scheduling exceeded the airport capacity and thus delays resulted.

As long as the airlines continue to overbook our runways, especially during peak hours, air traffic delays will continue. Passengers will wait.

Cramming extra flights into an already taxed system only creates congestion in the terminal airspace, on the runways and at the gates.

Even if controllers today had the most up-to-date equipment, air traffic delays would not be eliminated. Controllers would simply be able to keep better track of the aircraft.

WEATHER

A third and truly primary cause of delays is weather. Now, Ms. Garvey mentioned, some weather data from June, about 12 consecutive severe weather nights. I can tell you that I worked 10 of the 12 of those, and it was not an enjoyable situation.

Inclement weather has—and will continue to—play a significant role in air traffic delays, accounting for approximately 75 percent.

Planes fly on a complex set of invisible highways in the sky, with intersections, speed limits, separation requirements, and so on. When storms or inclement weather cause blockage or closing of one or many of these unseen highways, air traffic bottlenecks just like it does on the interstate at rush hour.

Controllers must then reroute this traffic. And it can take hours to recover from a brief shutdown of one air route.

I might interject here something that Senator Reid mentioned I thought was an interesting idea. He had an idea about—and I am paraphrasing from his comments—but he mentioned information kiosks for passengers to—to see weather information that is current across the country.

Often, airline complaints or any complaint that anyone has is often due to their misunderstanding of what is actually going on. It is certainly—maybe the airlines could be more forthcoming about that information, but if passengers could see for themselves the weather that they are going to need to fly through and around, that might help to keep complaints down

Speaking about Newark and its airport capacity, the centerlines of our main parallel runways lie only 900 feet apart. When weather is reduced below 1,000 feet of cloud ceiling or less than 3 miles of visibility, we have to revert to air traffic rules that dictate that these two runways be treated as a single runway. And that reduces airport capacity significantly.

Senator SHELBY. How often is that?

Mr. KRAGH. That specific instance is not as frequent as the type of summer storm delays that we encounter—probably 2 or 3 times a month is what we are talking about for reduced weather minimum.

Senator SHELBY. And what is the average period of time that you had to reduce two runways to one——

Mr. KRAGH. I do not have those specific figures.

Senator SHELBY. Okay.

Mr. KRAGH. But if a storm moves right over the airport or fog or low cloud ceilings move in, however long the weather takes to move out.

Senator SHELBY. Yes. Okay.

Mr. KRAGH. That is usually not longer than a day or perhaps a shift, affecting possibly two or three departure pushes, as we call them.

ARRIVALS AND DEPARTURES

One of the significant inhibitors to capacity at Newark is the fact that both arrivals and departures use a single stream flow into and out of the airport.

These patterns are necessary in the current airspace designation, because of the proximity of Newark, LaGuardia, Teterboro, and Kennedy Airports.

Almost all of the arrivals from wherever they are coming from in the country, except for a handful of propeller aircraft, funnel into one line at Newark for the main landing runway.

During heavy arrival push, each arrival clears the runway just as the next crosses the airport boundary. There is not a lot of room for error in our job at Newark. And I am sure my colleagues at other airports can attest to that.

All the departures at Newark, except again for a few props, depart from one runway. And they fly the same heading, the same pattern.

This prohibits us from using any of the reduced departure separation procedures, which are available, for instance, when two departures would take off on diverging endings.

This is due again to airspace constraints, with the proximity of the other airports. But it is also done in the interest of noise abatement, and as Senator Lautenberg can attest to, noise abatement is a very——

Senator LAUTENBERG. Testy issue.

Mr. KRAGH. And I am sure you receive just as many complaints about that as you do about other airline issues.

MODERNIZATION

Finally, modernization, NATCA has strongly and has always advocated modernization of the air traffic control system.

In fact, the union has been successful in making key points and today works with the agency on projects previously stalled or headed for failure.

Collaboration and teamwork have been instrumental in ensuring the success of well-documented DSR, which is a center radar, and STARS, a terminal radar, modernization projects.

It is no overstatement to say that NATCA has been instrumental in turning the agency around. We may now be assured the 21st century will see many viable, effective advances that work with controllers and pilots, not against them.

Yet, while new equipment is a necessary step for ensuring safe, efficient travel in the future, it will not solve the problem of airline-created delays.

DELAYS

In summary, without expanding domestic airspace and airport capacity, delays will not only continue to increase, but they will reach the point of gridlock in the foreseeable future.

Something must be done now to address the issue, because it is only going to get worse. It is time to stop pointing fingers, further dividing a splintered industry.

Teamwork and collaboration are needed to develop and implement long-term solutions and procedural changes to alleviate air traffic delays. And I think everybody agrees on that point.

PREPARED STATEMENT

Thank you very much, Mr. Chairman. I will be pleased to respond to any questions you have.

Senator SHELBY. Thank you.

[The statement follows:]

PREPARED STATEMENT OF EDWARD KRAGH

Good morning Chairman Shelby, Senator Lautenberg, and members of the Subcommittee. Thank you for this opportunity to testify on the problems contributing to aviation delays. My name is Edward Kragh and I am a Federal Aviation Administration (FAA) air traffic controller at Newark International Airport in New Jersey. I am also Secretary of the National Air Traffic Controllers Association (NATCA) local at Newark tower, NATCA is the exclusive representative of over 15,000 air traffic controllers serving the FAA, Department of Defense and private sector.

Airline delays, as we all know, are at an all time high. Passenger frustration is over the top. And, predictably, when something goes wrong, the finger pointing and the blame game begins. To that end, the airlines have embarked on a well financed campaign of misinformation blaming air traffic control for their delays. It is unproductive and unfair for one segment of the aviation industry to place responsibility entirely on another. It is simply untrue to say that air traffic control is primarily at fault for the hundreds of thousands of delays each year.

Safety is the controller's sole function and this should not be compromised to accommodate more passengers, more flights, or more profits for the airlines. We go to enormous lengths to personally ensure uneventful passage for millions of flyers each year. Controllers have no incentive to delay or hinder air traffic. Our motivation is to move aircraft as efficiently, safely and quickly as possible. The longer a delayed aircraft is in our airspace or occupies concrete on the ground, the more difficult our jobs become. However, the sole function of controllers is to ensure the safety of the flying public, and this should not be compromised to accommodate more passengers, more flights or more profits for the airlines.

Delays represent a multi-faceted problem. They must be treated as a comprehensive, ongoing circumstance that offers no single or easy solution. The obvious contributors to delays are heavy demand by travelers, scheduling decisions by airlines, bad weather, implementation of new air traffic controller equipment, an antiquated system, plus policy and complex procedures.

As you see, many delay factors are OUTSIDE our control.

First, let's review our crowded skies.

Our domestic air traffic control system is the largest, most complex and demanding in the world. It is also the safest. This is, no doubt, due in large measure to the dedication and professionalism of the controller workforce. Today, we are under extreme pressures to squeeze more planes into an already congested airspace.

Newark has had the dubious distinction of suffering the most air traffic delays of any airport in the United States for 6 of the last 7 years. Yet, during this same period Newark has only ranged from the 15th to 20th busiest facility in the country. This year we will handle approximately 463,000 operations, yet we will most likely suffer more delays than either Dallas/Ft. Worth, Chicago O'Hare, or Atlanta International, each of which will handle almost double the amount of operations. This begs the question "Why Newark?" The answer is simply airport capacity.

An airport's capacity to handle air traffic is a function of its size, the layout of its runways, the air traffic patterns, both arriving and departing, and the time frame in which a surge of traffic must be dealt with due to airline scheduling, By comparison with other major airports, Newark is small. Chicago O'Hare has over 62,000 feet of available runway, Newark only about 27,000 feet. Chicago has about 900,000 operations annually, Newark has approximately 463,000 operations. Newark is bound on all sides by major highways, railroads and the Newark Bay, making further expansion of the whole airport a daunting proposition.

A second reason for delays is UNREALISTIC HUB SCHEDULING.

The inefficient hub and spoke system used by airlines to schedule flights is a major source of delays. Flight departure and arrival scheduling is at the sole discre-

tion and control of the individual airline—NOT Congress, NOT the FAA, and NOT the traffic controllers.

To maximize profits, airlines intentionally overload the system. You show me a major HUB airport, and I'll show you over-scheduling. Airlines want to reduce operating costs and maximize revenue, without regard for other airlines' schedules already slated for prime times, terminal airspace or airport capacity.

It is like trying to cram 10 pounds of sand into a 5-pound bag. All scheduled flights will not be able to depart or arrive on time.

Yesterday, at Newark airport, during peak time between 6 p.m. and 7 p.m., there were approximately 25 delayed departures. Weather conditions were perfect and there were no equipment problems. Yet, airline scheduling exceeded airport capacity and thus resulted in delays,

As long as airlines continue to overbook runways, especially during peak hours, air traffic delays will continue and passengers will wait. Cramming extra flights into an already taxed system only creates congestion in the terminal airspace, on the runways and at the gates. Even if controllers TODAY had the most up-to-date equipment, air traffic delays would not be eliminated. Controllers would simply be able to keep better track of the planes.

A third and truly primary cause of delays is WEATHER.

Inclement weather has, and will continue, to play a significant role in air traffic delays—accounting for approximately 75 percent. Unfortunately, nobody but Mother Nature has any control here.

Planes fly on a complex set of invisible "highways in the sky" with intersections, speed limits, separation requirements, and so on. When storms or inclement weather causes blockage or closing of one or many of these unseen highways, air traffic bottlenecks just like it does on the interstate at rush hour. Controllers must then reroute this traffic. It can take hours to recover from a brief shut down of one air route.

At Newark, the centerlines of the main parallel runways lie only 900 feet apart. When weather is reduced below 1000 feet of cloud ceiling or less than three miles of visibility, air traffic rules dictate that runways this close together must be treated as a single runway. Thus, airport capacity is severely reduced.

Separation Procedures Affect Delays.

One of the significant inhibitors to capacity at Newark is the fact that both arrivals and departures use a single stream flow into and out of the airport. These patterns are necessary in the current airspace designation because of the proximity of Newark, Teterboro, LaGuardia, and Kennedy airports. Almost all arrivals, except for a handful of props, funnel into one line for the main landing runway. During a heavy arrival push, each arrival clears the runway just as the next crosses the airport boundary. All departures, except again for a few props, depart from one runway, flying the same heading. This prohibits us from using any of the reduced departure separation which is available when two departures will fly diverging courses. This is due again to airspace constraints, but it is done also in the interest of noise abatement for the communities bordering the field.

Finally, MODERNIZATION—A thinly veiled attempt by airlines to promote privatization of the FAA.

NATCA has STRONGLY advocated modernization of the a traffic control system. In fact, the union has been successful in making key points and, today, works with the agency on projects previously stalled or headed for failure. Collaboration and teamwork have been instrumental in ensuring the success of well-documented DSR and STARS modernization projects. It is no over-statement to say NATCA has been instrumental in turning the agency around. We may now be assured the 21st century will see many viable, effective advances that work with controllers and pilots—not against them. Yet, while new equipment is a necessary step for ensuring safe, efficient travel in the future, it will not solve the problem of airline-created delays.

In summary, without expanding domestic airspace and airport capacity, delays will not only continue to increase but they will reach the point of gridlock in the foreseeable future. Something must be done now to address the issue because it is only going to get worse. It is time to stop pointing fingers, further dividing a splintered industry.

Teamwork and collaboration are needed to develop and implement long-term solutions and procedural changes to alleviate air traffic delays. On that point, I believe we all agree. Perhaps we can use it as the starting point for a longer, more fruitful examination, and ultimately to solutions.

Thank you, Mr. Chairman. I would be pleased to respond to your questions.

GROWTH IN CAPACITY

Senator SHELBY. Mr. Mead, I note that total FAA aircraft operations, the work load of the air traffic control system, have grown only 8 percent in the past 5 years, yet cancellations are up over 60 percent; taxi times of over an hour and up, 130 percent; and delays are up over 50 percent. Those numbers seem to indicate that something is out of sync between the air traffic workload and the delay in cancellation problems we have been talking about here.

Is it unreasonable, Mr. Mead, to expect that we should be able to increase the capacity in the air traffic control system by 8 percent over a 5-year period? Is it unreasonable?

Mr. MEAD. No, sir. If that was spread evenly throughout the ATC system, I think would be a——

Senator SHELBY. But that is your caveat right there, is it not?

Mr. MEAD. That is exactly right.

Senator SHELBY. If it is spread evenly?

Mr. MEAD. That is exactly right. That——

Senator SHELBY. It is not going to be spread evenly, so explain.

8.3 PERCENT GROWTH

Mr. MEAD. Yes, I think there are two factors at play here. One is this 8.3 percent growth, which just to translate it into numbers, from—about 122 million operations in 1990, about 125 million in 1999.

Now, in 1995, there were about 115 million, which meant it dropped. It actually dropped from between 1990 and 1995.

Now, the 8.3 percent over that 5-year period is not spread evenly over the system. Some places it is much, much higher. And I think one factor here is the scheduling.

And one of the points I was trying to make in the testimony is that that is why we have to sort through exactly what the causes are because going down the slope of trying to deal with scheduling and make scheduling adjustments, at least from a Federal Government point of view, is a very tough order.

AIR TRAFFIC CONTROL EQUIPMENT

I believe a second factor is air traffic control equipment, sir. Air traffic control equipment, there is a lot of new equipment in the system, but it is not the new equipment that was promised, like the advanced automation system from some years ago, the wide-area augmentation system for satellites, the backroom software for the STARS acquisition. And you could go on.

But there is a lot of new equipment in the system, but it is not exactly equipment that is going to enhance capacity.

DELAY DATA

Senator SHELBY. Mr. Mead, is there any value to the consumer in the current delay reporting system that we have? We are all consumers. We all travel. But is there really any value to the consumer in the current delay reporting system we have been talking about. I do not see any.

Mr. MEAD. No. I think the arrival numbers are quite meaningful, but I do not believe the departure statistics are or the FAA system

is. I think all these systems need to be married together and we have to come up with a common agreement. It is not only confusing to the consumer. It is somewhat misleading to the consumer.

Senator SHELBY. Somewhat misleading——

Mr. MEAD. It is not just——

Senator SHELBY. It is clearly misleading, is it not? I mean, we have been talking about how they report statistics up here earlier.

They do not count different things. I do not know who wrote the rules, but we have got to go back to the truth. Basically, the consumer needs the truth. We need to know the truth about what the airlines are doing, how they report, how they game the system or do not game the system.

And I think the FAA and you, as the Inspector General, working with us can really make a difference there.

Ms. Garvey, do you want to comment on that?

Ms. GARVEY. Mr. Chairman, I would agree and in fact, I agree very much with the Inspector General's statement that really the information that we have right now is not helpful for consumers.

Senator SHELBY. It is really not truthful information, is it?

Ms. GARVEY. Well, it is certainly misleading.

Senator SHELBY. If it is misleading, it is not the truth.

Ms. GARVEY. I do want to speak to one effort that we began last winter and this is in cooperation with the airlines. And to their credit, they have come forward and said, "Look, we have got to really understand the delay issue better than we do now."

We have been, since last winter, collecting data at the top 20 airports that is going to serve as our baseline. The Inspector General has been very helpful in that effort as well. So we really will have at the end of this summer, I think, the beginnings of a baseline. We then need to develop a methodology so we can track the causes of those delays, which will be more challenging.

But you are absolutely right. We have got to get a better handle on what really are the causes and what are the definitions.

TELLING THE CONSUMER THE TRUTH

Senator SHELBY. Ms. Garvey, you are the Administrator for the Federal Aviation Administration. You are right in the mix of this, because of your job. How difficult will it be for the FAA and the air carriers to agree, if you can, to a common set of delay causing categories?

In other words, tell the American people the truth, the consumer the truth. I think that if we started out with the truth, then we will know what to build on, would we not?

Ms. GARVEY. Absolutely.

Senator SHELBY. How difficult is it going to be to get to the truth?

Ms. GARVEY. In all honesty, I think that is going to be a challenge.

Senator SHELBY. Why? You are the Administrator of FAA. Tell us how we can help you get to the truth.

Ms. GARVEY. Well, actually I think you have been very helpful.

Senator SHELBY. Yes.

Ms. GARVEY. And I will tell you that I do think the efforts that have been underway just in collecting the baseline information at

the top 20 airports, that is the first step. And I think we are all in sync with that. I will tell you I think there is so much at stake. I think everyone recognizes that. So while I do not want to underestimate the challenge, I think it is absolutely a solvable challenge. And one we can meet. But we are going to have to do it together.

REPORTING FLIGHT CANCELLATIONS AND DELAYS

Senator SHELBY. Mr. Mead, the I.G. interim report indicates that flight cancellations and delays are the primary source of passenger dissatisfaction. The number of flight cancellations and delays has risen over the last 5 years. And the number of on-board—on-board flight delays of one hour or longer increased 130 percent at the 28 largest airports in the United States.

Mr. Mead, what is causing the increases in extended delays here? How can you get your hand on this? How can we help you?

Mr. MEAD. I would like to first answer this and I imagine my colleague from Newark here has some observations on that too.

One reason this is occurring is because we have a lot of flights scheduled to leave at peak hours. There is an incentive to push away from the gate, because that way you show up as leaving on time—and get into the queue.

Senator SHELBY. But that is misleading to the people.

Mr. MEAD Yes, it is. So you have these long lines of planes.

And once you get in that line, you do not want to get out of it, because you lose your place in the queue.

Senator SHELBY. Sure.

Mr. MEAD. So there you are sitting in this aluminum tube for a couple of hours.

And I do not want to discount the influence of weather, but I do think it is a very important phenomena to point to what is happening at peak hours in terms of scheduling——

Senator SHELBY. Sure.

Mr. MEAD [continuing]. And also the incentives to get that plane out into the ramp area.

And I wanted to mention just one other example. I mentioned the BTS example about leaving——

Senator SHELBY. Yes.

Mr. MEAD [continuing]. Pushing back from the gate within 15 minutes, but consider another scenario. You do not push back from the gate within 15 minutes. In other words, you sit there in the terminal for 2 hours because the airline decides not to leave.

Then after a 2-hour delay, your plane backs away from the——

Senator SHELBY. The airline decides not to leave, now——

Mr. MEAD. Right. The airline decides not to leave.

Senator SHELBY. Why? Waiting on another flight maybe?

Mr. MEAD. They may wait on another flight. There could be any one of a number of reasons. But finally the plane backs away from the gate. So it will show up as a late departure, because it left more than 15 minutes after its scheduled departure. Now, assume further that the flight transits to the wheels up point on the runway within a normal time and then takes off. That flight will be recorded as on-time by FAA, even though there has been a 2-hour delay, and from the consumer's point of view, they are still 2 hours late.

Senator SHELBY. Absolutely.

Senator Lautenberg.

SYSTEM CAPACITY—NEWARK

Senator LAUTENBERG. Thanks very much, Mr. Chairman.

As I listen to this very well-done testimony, I have got to ask the question. Is there a point at which we cannot increase the capacity of the system to go beyond a particular volume of traffic, or is it unlimited? Can we fill the skies with more airplanes?

I often ride in the second seat in a smaller airplane. And I want to tell you we have TCAS in the airplane, a system that is even broader. I hear traffic, traffic, traffic constantly. And I travel in a fairly congested area.

But is there a point in time and capacity that we can no longer satisfy the need? When you hear about planes leaving—I came down here for the Million Mom March the Saturday night before that Sunday. I got on a shuttle out of New York. And it was a 6:00 o'clock flight. We arrived here almost midnight.

We—the flight—we flew two-thirds of the way down and then could not land. Weather came in, turned around and went back. After sitting in—on the runway for 2 hours, then on the second flight, another hour delay—6—almost 6 hours.

So do any of you want to volunteer an opinion on that?

Mr. KRAGH. Yes, sir. To speak of Newark as a microcosm of the system as far as airports go, I spoke earlier about the expansion of the Newark Airport being an almost impossible task at this point. You would have to move major highways and major infrastructure. There is definitely a terminal capacity, so to speak, a place where you cannot go beyond. Because each airport would have—the surrounding communities would have to be dealt with. I mean, there is a fine balance between how much traffic we are going to fit in a certain departure pattern, or as I said we could fan the departures out and get a lot more planes out, but the surrounding communities would not stand for that.

Now, we talk about a system at Newark where we are shoveling 10 pounds of sand into a 5-pound bag. That is the first hour. For the next 4 hours, we are only putting 2 pounds of sand in the 5-pound bags. We have got airline scheduling that is surrounding the peak hours, 7 a.m., 8 a.m., and for the rest of the morning shift, we have 20, 30 departures an hour, which can be dealt with very easily.

How—of course, the airlines have to serve their customer and supposedly the customer wants to depart at those times, but does everybody want to be in a long line? I mean, it is the same thing with rush hour traffic in the morning. Mr. Mead suggested to me that there is a finite end to this. There is a point you come to where you cannot fit anymore planes into that type of a system. We need to spread the schedule out into the hours where there are no planes departing.

DEPARTING TIMES

Senator LAUTENBERG. Well, it talks about a lot of creative thinking that can be done. I do not think that airplanes ought to be able to leave the gate and it is just like the supermarket. When you call

into the tower or the flight service unit, you get a number and that number says you will be called upon when there is 20 minutes or less—if that is the appropriate time—before you take off.

Meanwhile, the passengers can be treated like human beings, instead of stuck in there with no capacity to make phone calls, et cetera. And if I had not written a law that passed here in 1987, smoking—you know—can you imagine what it would be like now, sitting there for 2 hours? The pilot says, "Well, we are going to turn the smoking lamp on," right when——

Senator SHELBY. Thank you. Thank you.

Ms. GARVEY. Thank you.

Senator LAUTENBERG [continuing]. And watching everybody gag and smoke and—so there is that fundamental question, what—why cannot we improve it? I think the insulting behavior—and, again, I think the airlines are great, but they are now at a point where having made over $10 billion pre-tax last year, they are motivated by profits and it is a business and so it should be.

But the customer does not always come first. The profits come first. The shareholders—the stock price comes first. And you cannot operate a commodity like airlines in that way.

And, frankly, I think you have made the case. The Chairman must be weary of hearing it from me, but——

Senator SHELBY. No. No. No.

Mr. KRAGH. Senator, the case is——

Senator SHELBY. Yes.

Mr. KRAGH There is such a time when the sort of a take a number system that you spoke of occurs and that is during winter operations. If Newark Airport or any airport had snow on the runways, everybody understands that the capacity of the airport is severely reduced. And at that time, the airports capitulate with air traffic and they say we are going to go into a slot-type of a system.

Senator LAUTENBERG. Yes.

Mr. KRAGH. So during times like that, the airlines seem to understand there is a finite capacity.

USE OF HIGH SPEED RAIL SERVICE

Senator LAUTENBERG. It could—it could be done. The problem is it would not enable or permit the airlines to flood the terminal and flood the concrete.

I mean, maybe they ought to have the people get on line out in the concrete and get on the airplane when it is time to go. As bizarre as these systems sound, the situation presently is more bizarre.

But it does say one thing, my friends. Everybody has to realize—and I am not—I did not grow up from a railroad family, but I am being railroaded here by our inability to face up to one way to solve part of the problem, and that is to take the inefficient legs that are 200 miles or 300 miles and say, wherever we can, have high-speed rail service at a considerably lower cost than just the $3 billion lost from—from delays and that says okay, you get on in New York and you are in Washington in less than 2 hours.

Believe me, there would be—terrible news a Concorde just crashed into a hotel in Paris. Sorry to make that announcement. Do you know anything? That is awful.

But getting back to the railroad system, we have a proposal to put $10 billion into railroads that could greatly relieve the aviation system. And while some of the airlines might not like the reduced revenue opportunity, they could do better more efficiently, I predict, make more money—bringing it down to the bottom line—by servicing the system in a way that has the customers happy about it.

I love to fly. I fly a lot, as I said, in a second seat. I fly in big airplanes, little airplanes. And it—I marvel at man's capacity to have created this instrument, but we—we need help. And the only way to get real help, I think, is to try to relieve some of the capacity requirements that we have.

CONCORDE ACCIDENT

Is there any other news on that Concorde?

Senator SHELBY. Ms. Garvey, do you know anything?

Ms. GARVEY. Just pretty much what you said, Senator, that an Air France Concorde crashed in Paris at 11 a.m. this morning. No further news at this point.

Senator SHELBY. 11 a.m. our time?

Ms. GARVEY. I believe it is our time.

Senator SHELBY. Our time.

Ms. GARVEY. 11:09, our time, I believe.

Senator SHELBY. Senator Campbell.

CAUSE AND IMPACT OF DELAYS

Senator CAMPBELL. Thank you, Mr. Chairman. That is tragic news. I am sure we will be hearing more of it, if people have lost their lives in that crash.

Let me talk a little bit about the delays too. I know that the most common are weather and mechanical, but certainly some that United Airlines is going through now apparently is from not training enough pilots to replace the ones that are retiring, as I understand it.

And certainly, the limited capacity that Mr. Kragh spoke about, too many aircraft and one runway, I understand that.

I come from a pretty tough country to fly in, the Rocky Mountains, as you know it, we get 100 mile-an-hour winds. My gosh, we get tornadoes and snow. We get ice that will build up an inch a minute, and certainly some high winds too.

There is a saying among pilots—I am sure you have heard this—that sometimes even the birds will not fly. And I have to tell you that when weather is that bad, I have no problem with cancellations. I want to stay alive and if the birds will not fly, I do not want to either.

But most of the time, the complaints we get are that the—what the airlines tells people why they are cancelled is not always the truth. They are sometimes told that they are cancelling because of weather. And as I understand it, they have to reimburse if—or they have to make some compensation, buy them a meal or a room if they have to stay overnight, something of that nature if it is weather. But not if it is mechanical—or no, it is the other way around.

If it is mechanical, they have to reimburse them. If it is weather, they are not. Is that correct?

Mr. Mead, yes.

Mr. MEAD. Sir, yes, this is a gray area. As a matter of fact, one of the commitments—the one to notify customers of known delays—cancellations, and diversions—that has a sub element that you disclose to people what your policies will be relative to accommodating them, if they get delayed.

And the contract of carriage, which is the legal document that governs your flight and what happens if you get delayed, that usually says that they will only put you up overnight if, in fact, you are diverted to another airport.

The plans that the airlines have implemented pursuant to this voluntary commitment go further, and they say we will accommodate you overnight if the delay is occasioned by our own operation.

But we do not know what "our own operations" means. It is not defined. And it is something that the airlines can define themselves.

But one of the points we make in our report is we would like to see greater clarity brought to that, and we would like to see the contracts of carriage expanded to provide accommodations overnight.

PASSENGER RIGHTS BILLS

Senator CAMPBELL. Well, one of the complaints we get, of course, is people say that they were told they—the airline—the aircraft was cancelled because of weather, and they were sure it was not, so that the carrier did not have to put them up for the night. I am sure you have heard that kind of complaint too.

Let me ask Ms. Garvey, there—there is a bill in now, I understand, on the House side that basically says if the plane is on the runway for over an hour and half, it has to return to the gate. Have you seen that bill or——

Ms. GARVEY. I have not seen that bill specifically. I know there are a number of passenger rights bills that have been introduced, and I know that Mr. Mead has suggested and we would agree that the airlines have until December to implement the voluntary program. We think letting that run its course, letting the Inspector General do its report would be useful.

But we certainly know there is great interest in these issues.

Senator CAMPBELL. Yes. Well, and certainly sitting out there 9 hours like one plane did, we saw that in the news, a number of lawsuits followed that, as you know.

Ms. GARVEY. Yes. Yes.

COSTS OF DELAYS

Senator CAMPBELL. There is also the cost of lost income to people. I have a letter here—in fact, Mr. Chairman. It is from Pacific Coast Beauty Products, into the record. This is an example of a man who spends $50,000 a year on airline tickets for his business, but has lost a considerable amount more than that because of the delayes—they delayed flights, and he was unable to get to a certain place to sign a timely contract, things of that nature.

And do we have any statistics on the accumulated loss in terms of millions or billions from the delays in the last year?

Ms. GARVEY. We do not have that kind of information at the FAA, but——

Senator CAMPBELL. Mr. Mead, do you have any information like that?

Mr. MEAD. Yes, I do.

Senator CAMPBELL. Tell the Committee about it.

Mr. MEAD. Here is just some ballparks. It is an estimate of what it costs the air carriers first, $3.3 billion in 1999. When——

Senator CAMPBELL. This is the air carriers?

Mr. MEAD. That is the air carriers. And when you put in the passengers, you add—add another $4 billion.

Senator CAMPBELL. In——

Mr. MEAD. In 1999.

Senator CAMPBELL. Roughly $7 billion then you are saying?

Mr. MEAD. Yes. We estimate that the delays cost the 10 major carriers about $3.3 billion in 1999, and I would say about another $4 billion for the consumers.

Senator CAMPBELL. Those consumers that lose that money, of course, have no recourse either, as I understand it, is that correct?

Ms. GARVEY. That is correct.

Senator CAMPBELL. Thank you, Mr. Chairman. I have no further questions.

Senator SHELBY. Senator Specter.

UNITED AND U.S. AIRWAYS MERGER

Senator SPECTER. Thank you very much, Mr. Chairman. The issue of airlines' delay is obviously a very important one for many reasons.

There is a proposed merger acquisition, as everyone knows, with United and U.S. Airways. In a fairly exhaustive study revealed Sunday, July 16, 2000, the New York Times laid findings about delays in on-time arrivals, and among the 10 major airlines listed, the line with the most delays, fewest on-time arrivals was United.

And on a category of the most delayed regularly scheduled flights, of the four selected, D.C. to Seattle; Phoenix to Ft. Lauderdale; Denver to St. Louis; Chicago to Seattle. United had four of the most delayed flights.

The question that I have posed to United officials, including their CEO in our hearings is why should there be a merger when the number one airline is going to take on the number six airline, when United's house is not in order.

In addition to the matter of delays, which is the subject of this hearing, the New York Times survey also found that United lost the most baggage because their computers did not communicate with each other.

I would be interested in your views, Ms. Garvey. You are not the antitrust division, but I would be interested in your views from your position as to whether you think it is advisable to have a merger of United and U.S. Airways when United's house is so badly out of order at the present time.

Ms. GARVEY. Senator, you are right. I mean, certainly the Justice Department and the Department of Transportation are very fo-

cused on that and are asking exactly the same questions that you have asked and are focused very much on what are the impacts to the consumer. And ultimately, that has to be the driving factor, are these benefits positive for the consumer?

Senator SPECTER. Well, the——

Ms. GARVEY. From our perspective, from the FAA's perspective, what we focus on is the whole issue of safety. Are the elements of safety in place? Do they have the right kind of training? Do they have the right kind of maintenance systems and so forth? From our perspective, United and U.S. Airways certainly in the areas of safety, they have been very focused on that. They have some excellent people and I think have some very good standards.

But I think certainly the consumer issues that you are raising are exactly the same question that the Department of Transportation and the Justice Department are focused on. You have the right questions.

Senator SPECTER. Well, the Department of Justice is going to look at lessening of competition, which is——

Ms. GARVEY. Yes.

Senator SPECTER [continuing]. A different subject than on-time arrivals or consumer—customer complaints, et cetera.

Ms. GARVEY. Well, that is true—that is true.

Senator SPECTER. To what extent will the Department of Transportation be involved in the ultimate decision by the Federal Government as to whether or not to oppose the merger?

Ms. GARVEY. I think the Department of Transportation, particularly the Secretary, will play a very key role. Although I am not part of those discussions—I do understand that both the Secretary's lawyers and his key staff people are in very close communication with Justice. Justice, as you said, is focused on the competition piece, which is important to the consumer. And we are bringing or the Department of Transportation is bringing their expertise around some of the consumer issues, as well. I think the Secretary will play a very key role in those discussions.

FACTORS IMPACTING AIRLINE MERGERS

Senator SPECTER. So you are saying that the consumer issues like on-time arrivals will be a factor in the Federal Government's decision as to whether or not to oppose the merger?

Ms. GARVEY. Well, I certainly do not like to speak for the Secretary, but I would absolutely believe that all of those issues will be folded into this discussion and very much focused on. I think ultimately——

Senator SPECTER. On-time—on-time arrivals, baggage, computers——

Ms. GARVEY. Just generally——

Mr. MEAD. I think you——

Senator SPECTER. Let me finish the question. The computers communicating, the whole picture as part of the government's position on the merger, yes or no, Mr. Mead?

Mr. MEAD. I think you have raised an interesting question and frankly I think the answer will be that those factors have not been considered in the past, and that this is a kind of—rather a de novo matter.

Normally, in a merger, the issue you consider are more or less economic and competitive. Will this route be served? Will fares be oligopsonistic or monopolistic? Those types of considerations.

I think you raise a very good question. This issue came up in the railroad mergers as a result of the declining service that went beyond just what their rates were.

And I do not feel comfortable telling you that the Department will be considering these factors in their merger considerations, sir.

Senator SPECTER. You say you do or you do not feel——

Mr. MEAD. I do not feel comfortable telling you that the Department will be considering these factors.

Senator SPECTER. Well——

Mr. MEAD. Do I think they should, is another question.

Senator SPECTER. Do you think they might? Do you think they should—de novo, maybe break a little ground here?

Mr. MEAD. Yes, sir, I do. Yes, sir, I do. I believe that the circumstances of the last 4 or 5 years have been instructive, that there are factors that are important here that go way beyond just how much you are going to pay for a ticket and whether there is going to be service from point A to destination B.

Senator SPECTER. And certainly a factor in what you pay, if part of what you pay is lost time—or part of what you pay is lost time from your baggage non-arrival, or part of what you pay is all of the attendant inconveniences, which are a dollar and cents matter for loss of time and to do other things. If a professional is traveling, part of the pay is for the ticket. Another part of the pay is for his time lost if Senator Lautenberg loses 5 hours on a trip at the minimum rate, $5.15 an hour, that is over $25 lost.

If you are a high-priced lawyer, those 5 hours would be $1,000 an hour, $5,000. So Senators do not figure too highly on that scale, but that certainly is part of the pay factor.

STARS AT PHILADELPHIA AIRPORT

Ms. Garvey, on the subject of delays and the STARS system coming into Philadelphia—something you and I have talked about on a number of occasions—I have become very concerned about air traffic controllers and have gone into that dark room. And I am sure Senator Shelby has, too.

And you see those dots on the sky. And you think of yourself in one of those planes, which is a dot on the sky. And then suddenly it all turns black, and there is a loss of communication.

And I appreciate the fact that you sent people to Philadelphia very promptly, but that whole system is antiquated at best, and I would be interested to know if we are going to meet that schedule of September 2002 or might possibly move it up to August 31?

Ms. GARVEY. Well, August 31 would be wonderful. Senator, let me—let me just——

Senator SPECTER. Do you think you can do that?

Ms. GARVEY. We will certainly try. Let me——

Senator SPECTER. How about August 30th? Senator—Senator Shelby taught me how to negotiate.

Senator SHELBY. No. No.

Ms. GARVEY. Right. That is very good negotiating.

Senator SPECTER. He is a good lawyer. [Laughter.]

Ms. GARVEY. I do want to go back to something that that Ed mentioned a little bit earlier and that is the terrific role that the controllers have played with STARS. I think we have really turned that program around. Your help, both in working with the individual controllers in—in Philadelphia has been extraordinarily helpful. But we are on the right track with STARS. We have got the early displays in two of our facilities and working out a lot of the kinks there. And that is going very well. We have been able to put the full STARS into the—into England for the Defense Department and that, too, we are learning a great deal from and is going well.

So I am still confident that we are going to meet that schedule and we are working very hard with the controllers on it.

Senator SPECTER. Well, I am glad to hear that. And I compliment you on your responsiveness in the past. Thank you very much.

MERGER IMPACT ON CUSTOMER SERVICE

Senator SHELBY. Thank you, Senator Specter.

Mr. Mead, just to follow up on—on an area that Senator Specter was getting into. Do you have any thoughts right now about the—how the pending proposed mergers would affect customer service? It has got to in time.

Mr. MEAD. Well, I guess the best response to your question, sir, is to point to what the statistics show.

Currently, if the two airlines merge, the merged entity would be rated last in the category of mishandled bags, involuntary denied boarding and customer complaints. And that is based on May 2000 data.

AIR TRAFFIC SLOWDOWN IN CHICAGO

Senator SHELBY. Ms. Garvey, I am going to refer to a July 21 Chicago Tribune article, reporting that—and I will quote—"The FFA, Thursday, July the 20th, broadened its investigation of an air traffic slowdown near O'Hare International Airport earlier this week and promised to severely punish agency employees suspected of intentionally forcing hundreds of airlines—airline flights nationwide to be delayed or cancelled."

I am still quoting from the article, "FAA officials say they are trying to determine whether the slowdown was the result of a job action on the part of a disgruntled—of disgruntled controllers, or caused by unusual weather phenomena.

"Delays at O'Hare ran up to three hours and whether—and neither FAA nor airport officials could attribute the problem to bad weather."

I understand this is something that you have asked the Inspector General to look into, Ms. Garvey, is that right? Can you shed any light on this?

Ms. GARVEY. Well, let me first of all say that what happened at Chicago really made me heartsick.

Senator SHELBY. Yes.

Ms. GARVEY. I mean that just should not occur. And there are two groups of people I care a lot about in that incident.

One, obviously, are the travelers, and they were inconvenienced if the facts bear out to be true.

Senator SHELBY. Yes. One of the busiest airports in the country.

Ms. GARVEY. Absolutely. But the second group of people is—you know, we have got air traffic controllers that are the best in the world.

Senator SHELBY. I know.

Ms. GARVEY. I was really encouraged to——

Senator SHELBY. Well, we have been impressed with Mr. Kragh, with——

Ms. GARVEY. Right, very much so. And so I think anything that reflects on what is a whole organization in a negative way is obviously something of great concern, and——

Senator SHELBY. You got to get rid of those kind; they will ruin the whole group.

Ms. GARVEY. Because it is a great group. I will tell you that I called on Mr. Mead, and he was immediately responsive, asked if he would join with us in the investigation and add his good expertise and the force of his office to the investigation. We have a terrific team out there. They are doing the investigation. We want to get to the facts. I want to be fair to everybody involved. I certainly do not want to jump to conclusions without the facts.

Senator SHELBY. Yes.

Ms. GARVEY. We are getting an additional briefing on Wednesday of this week to know sort of exactly where we are. And we will certainly take the appropriate action, but——

Senator SHELBY. You keep the Committee informed.

Ms. GARVEY. We will absolutely keep the Committee informed. In fact, we will be calling folks on Thursday, just to let you know where we are, so——

Mr. MEAD. Mr. Chairman, there is something important that Administrator Garvey said that I do not think should be lost in the record.

And that is that in this instance, a Committee of Congress, or the Office of Inspector General on its initiative, or some external complaint, is not what inspired our involvement in supporting the FAA in this review or investigation.

It was the Administrator and her senior people that initiated the request. And we are joining with——

Senator SHELBY. That is good.

Mr. MEAD [continuing]. Some of her senior people. And I think that ties back into a point you made when you opened up the hearing about the Inspector General should not always have to initiate these things.

And this is, I think, a good example of where we did not.

Senator SHELBY. Where the Administrator and her office initiated this?

Mr. MEAD. Yes, sir. I think that is a real credit to her.

Senator SHELBY. You are to be commended for that, Ms. Garvey.

Ms. GARVEY. Thank you.

Senator SHELBY. You are hands-on. And this is an example of where you have to be hands-on. And we will look forward to see what happens on this.

Ms. GARVEY. Thank you.

Senator SHELBY. We have a number of questions for the record by me and some other members that had other hearings this morning. And we look forward to your responses on that.

SUBCOMMITTEE RECESS

Senator SHELBY. The subcommittee is recessed.

[Whereupon, at 11:45 a.m., Tuesday, July 25, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

WEDNESDAY, SEPTEMBER 6, 2000

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:05 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Richard C. Shelby (chairman) presiding.

Present: Senators Shelby, Domenici, Specter, Gorton, Lautenberg, Byrd, Mikulski, and Kohl.

OVERSIGHT HEARING ON THE FIRESTONE ATX AND WILDERNESS AT TIRE RECALL

OPENING STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. The hearing will come to order.

Why are we here this morning? If we are here this morning to hear Ford say this is only a tire issue, then this is a waste of a lot of people's time. If we are here this morning to hear NHTSA say that they did their job under the controlling statutes, then this Senator is going to be disappointed in the job that they are doing. And if we are here this morning to hear Firestone tell us that there is not something wrong with these tires, then we step through the looking glass.

I will tell you why we are here this morning. We are here this morning because in July 1998 a State Farm Insurance Company analyst notified NHTSA'S Office of Defects Investigation of a growing number of incidents of Firestone tire failure when mounted on 1991 through 1995 Ford Explorers, and nothing was done.

We are here this morning because in 1998 a Saudi Arabian Ford-affiliated dealer wrote to Ford indicating that they had notified Ford of problems with the Wilderness AT tires, and no one notified NHTSA.

We are here this morning because in March 1999 a Ford internal memorandum stated, and I quote, "Firestone Legal has some major reservations about the plan to notify customers in the Middle East", end quote, and expressed the concern that the U.S. Department of Transportation would have to be notified because the same tires were sold in the United States, yet no one told NHTSA.

We are here because Firestone and Ford watched as the number of warranty claims escalated beginning in 1995. Again no one raised a red flag.

And we are here because NHTSA received a growing number of consumer complaints of tread separation on these Firestone tires starting in 1998, yet NHTSA failed to initiate an investigation.

We are also here because finally—yes, finally, the news media broke the story in Texas in February 2000. NHTSA consumer complaints shot through the roof and the problem could no longer be contained, or perhaps concealed.

We are here because you can hardly read a newspaper or turn on the television without another shoe dropping on this story, and we are here because the process of identifying this substantial safety issue did not work quickly enough, even though, I submit, it should have.

We are here because Ford and Firestone had at a minimum a moral obligation to make sure that the products they sell to the American public and other people in other countries are safe, and yet they both failed to bring this issue to the consumers' and the Federal Government's attention, at the cost of dozens of lives, I am afraid, and we are here to get some answers today.

PREPARED STATEMENT

I trust our witnesses will help us understand how things could have gone so long without action, and how Government, industry, and consumers can make sure that this never happens again. I ask unanimous consent that my written statement be made part of the record.

[The statement follows:]

PREPARED STATEMENT OF SENATOR RICHARD C. SHELBY

This hearing is called to order. It's hard to spend more than a few minutes talking with my constituents, watching the television, or reading a paper without Firestone tires being mentioned. I hope the witnesses testifying before the Committee this morning will shed some light on how this could have happened and why it took so long for the problem to be identified. I believe that American consumers have a reasonable expectation that if tires are failing, the manufactures, the automobile companies, and the Federal Government will take every step to protect them from becoming another highway traffic fatality.

I would like to know how it could take us 10 years, dozens of lives, numerous lawsuits, substantial consumer complaints, tire replacements overseas, and repeated expressions of concern by an insurance company before any action was taken to initiate an investigation into the safety of a product being used by millions of American families. Simply put—the American people deserve better.

I would be disappointed if NHTSA claims that this issue was identified promptly. I would be disappointed if Firestone/Bridgestone representatives claim that there is not a problem with Firestone ATX, ATX II, or Wilderness AT tires after thousands of their products lie in tatters on our nation's highways. I would be disappointed Ford Motor Company representatives claim that this is solely a tire problem after they have been equipping Ford Explorer on virtually a sole source basis for the life of the vehicle, have heard repeatedly from their consumers about these tire problems, and have tacitly ignored the human cost caused by the combination of these tires on their sport utility vehicles.

This is a brief summary of what we know:

—Ford Explorers have been equipped with Firestone ATX, ATX II, or Wilderness AT tires since the introduction of the vehicle.

—Starting around 1996, lawsuits filed against Bridgestone/Firestone. All cases settled, except for one which went to trial and in which the jury sided with Firestone.

—In 1998, a Saudi Arabian Ford-affiliated dealer wrote to Ford indicating that they had notified Ford of problems with the Wilderness AT tires.

—From 1996 to 1999, Ford replaced Firestone tires in a dozen foreign countries including Saudi Arabia and Venezuela.

—By May 2, 2000, NHTSA has received a number of complaints regarding Firestone tread separation, especially after a Houston television news story. NHTSA tallied a cumulative total of 90 consumer complaints and determined 4 deaths involved tire failure. NHTSA Office of Defects Investigations opens a preliminary evaluation of ATX, ATX II, and Wilderness tires.

As of August 3, NHTSA has received 193 complaints regarding tread separation. Firestone offers free inspections of its tires.

—Between August 3 and 7, Sears and other leading tire retailers suspend the sale of tires covered under the scope of government inquiry.

On August 9, Firestone initiates voluntarily recalls of 15 inch ATX, ATX II, and Wilderness tires produced at its Decatur, IL plant. 14.5 million tires are covered by the recall, although Firestone estimates that only 6.5 million of these tires are still in use. The company estimates that there are 3.8 million ATX or ATX II tires and 2.7 million Wilderness tires that need to be removed from the road.

—On August 9, Ford changes its PSI recommendation from 26 to a range between 26 and 30. Firestone continues to insist that the proper PSI is 30.

—As of August 10, NHTSA has received 270 consumer complaints and revised the number of deaths associated with tread separation to 46 (double estimate of previous week.)

—As of August 15, NHTSA has received over 750 complaints and is aware of at least 62 fatalities and over 100 injuries alleged to be related to a tire failure.

—By August 31, NHTSA has received over 1,400 complaints, including 88 reported fatalities related to these tires.

It seems to me that alarm bells were ringing, but that the people in a position to do something weren't listening. I don't know whether there is enough evidence to show who failed to respond first, but it sure looks like several critical players were, at the very least, covering their ears.

Tires are literally where the rubber meets the road with regard to highway safety, and I believe more should have been done to inform and protect consumers. Consumers have a legitimate expectation that tires certified by NHTSA and manufactured by premier brand name tire manufacturers should not fail if properly maintained, pressurized, and repaired. Clearly, the incidence of failure with the Firestone ATX, ATX II and Wilderness AT tires leads me to believe that expectation has not been met and I fear that there may have even been a conscious effort to shield this failure.

I trust our witnesses today will help us understand how things could have gone so long without action—and how government, industry, and consumers can make sure that this never happens again.

Senator SHELBY. Senator Byrd, do you have an opening statement?

STATEMENT OF SENATOR ROBERT C. BYRD

Senator BYRD. Mr. Chairman, last year the American people drove over 2.6 trillion miles on the Nation's 8.3 million miles of urban and rural highways. More than in any other country of the world the American public travels by automobile along a highway system that is the lifeblood of our economy. When our citizens get in their cars every morning they expect two things: (1) they expect the roads to be safe, and (2) they expect their vehicles to be safe. They do not view safety as a luxury. They view it as a necessity.

So when the American people learn that safety may be compromised, they worry. When they learn further that companies may be knowingly endangering their safety, they become angry. This hearing this morning is not just about the topic of safety. It is also about the topic of honesty. It is about when certain companies knew about defective tires, and when those companies chose to do something about defective tires.

This issue of timing is elemental to this inquiry. Eighty-eight lives have already been lost due to the defects that have surfaced with these Firestone tires. Just this past weekend another Ford Explorer with a shredded tire rolled over on the highway, injuring six people and killing a 10-year-old boy. He may well have been the 89th fatality.

The courts, not this subcommittee, will determine who is really at fault for all these deaths, but I am glad this subcommittee is meeting this morning to address the relevant issues to this matter that are in the jurisdiction of this subcommittee.

I congratulate you, Mr. Chairman, for holding the hearing. These hearings include issues like whether Ford and Bridgestone have been responsive and forthcoming with Federal safety officials, and whether those Federal officials have been proactive or reactive, or unactive or inactive when it has come to guaranteeing the safety of the traveling public.

In my home State of West Virginia thousands of citizens are engaged in very dangerous professions each day, whether it is coal mining, one of the most dangerous professions anywhere, or working in our chemical plants or in our timber industry, or on our railroads.

The citizens face danger from the moment they punch in in the morning to the moment they punch out in the evening, and we are responsible for seeing to it that they do not face additional danger when they get into their cars at the beginning of the day and when they get into their cars at the end of their shift and seek to return to their families.

I hope that the inquiry this morning will point us on the path towards better ensuring the safety of our citizens.

Thank you.

Senator SHELBY. Senator Lautenberg.

STATEMENT OF SENATOR FRANK R. LAUTENBERG

Senator LAUTENBERG. Thanks, Mr. Chairman. My apologies for being late—I was dealing with another safety issue—but I am pleased that you have convened this subcommittee this morning to throw some additional light on this deadliest recall in American automotive history.

The problems that have surfaced with Bridgestone/Firestone tires and the Ford Explorer vehicle have caused a great deal of anxiety and concern across the country, and I hear from my constituents in New Jersey as well as other people who just feel ill at ease knowing very well that a tire may give out in the vehicle that they are riding in, endangering themselves and their families.

I am sure you have heard it already, but 88 lives have been lost. Over the course of the last month thousands of American households have discovered that their lives can be at risk for no reason of their own as they leave their driveway.

There are a great many complex issues we should address this morning, but there are three particular questions that I think we have got to focus on at a minimum. First, we have got to ask whether both Bridgestone, Firestone, and Ford have acted responsibly through this ordeal.

There is no question that both companies are now making grand efforts to satisfy consumers who are demanding safety replacement tires. However, we need to ask whether both companies were equally concerned for their consumers when they are settling dozens of lawsuits stemming from deaths and injuries due to defective tires and insisting as part of the settlements that no documents or information be made public.

Even today, the National Highway Traffic Safety Administration has identified 1.4 million additional tires that they believe Firestone ought to voluntarily recall. To date, Firestone has refused to do so, despite the fact that some of these tires have the worst record of tread separation than the 6½ million tires that have already been recalled.

Second, when reviewing this tire problem we have got to look at the related issue of vehicle roll-overs. Roll-overs caused nearly 10,000 deaths each year, roughly a quarter of all highway fatalities. Back in 1992, when I was chairman of this subcommittee, we aggressively encouraged NHTSA to move forward with its proposed regulation setting a standard to limit the propensity of vehicles to roll over.

Since that time, consumers have purchased more and more sports utility vehicles, vehicles that are even more prone to roll over than conventional cars. Regrettably, NHTSA abandoned its effort to set a roll-over standard for these vehicles. Today, we read in the press that Ford may have deliberately recommended a lower tire inflation pressure so as to minimize propensity of its Ford Explorers to roll over. Some have speculated that this lower inflation pressure may be exacerbating the tread separation problem, and I think while I am not an automotive engineer, one need not be, I think we have got to use this occasion to refocus our attention to this roll-over problem and ask whether the time has come for stronger Federal regulation to be published.

And third, we must review whether NHTSA has had adequate legal authorities, funding, and the motivation to guarantee the safety of the driving public. We know from press accounts that the manufacturers knew of this tire problem well before it came to the attention of the regulators. Indeed, tires were being recalled in other countries without the knowledge of NHTSA officials.

Under current law there is no requirement for manufacturers to pass along their record of complaints to NHTSA. The manufacturers are only required to alert NHTSA of a problem when they have determined themselves that a safety problem exists. Even today, Firestone has not conceded that the tires that have been recalled are defective, so clearly it is not an adequate situation to allow the manufacturers to make their own determination as to when NHTSA should be notified.

I believe also, Mr. Chairman, we need to make measures to strengthen NHTSA's hand in gathering information from all available sources to identify defects earlier. Once press accounts came out regarding the problems with these tires the number of incidents reported to NHTSA skyrocketed. We have got to ask why NHTSA did not have access to these reports earlier, and what we need to do to compel a better reporting system on the part of the

manufacturers to those Federal authorities that are responsible with ensuring our safety.

I thank you, Mr. Chairman.

Senator SHELBY. Senator Gorton.

STATEMENT OF SENATOR SLADE GORTON

Senator GORTON. Mr. Chairman, you and Senators Byrd and Lautenberg have properly focused attention on a number of questions before us at this time. The adequacy of oversight on this problem and the promptness of the response to this problem of the National Highway Traffic Safety Administration is one the response of Ford Motor Company, particularly as the principal users of the tires and the way in which they dealt with consumer complaints and their own knowledge of danger related to them and the responsibilities of the manufacturer, Bridgestone/Firestone, each of those is vitally important.

I would like to add two more considerations, however, to this hearing. One relates to my own constituents who are driving automobiles, SUV's particularly, with these tires on them and the fact that the manufacturer has set a staged recall under which those of us in less hot climates have to continue to drive on these tires for a considerable period of time and replace them on our own, rather than having this recall be prompt, immediate, and broadbased, even though that requires the manufacturers to supply tires manufactured by others rather than by themselves.

Second, the confusion to all of the users of these tires Nationwide as to how they deal with the tires for the hopefully very short period of time they are going to use them. Ford said the proper pressure was 26 pounds per square inch before the recall. Now it has given a range of 26 to 30. Bridgestone/Firestone continues to say it ought to be 30 pounds per square inch.

We called Ford dealer Koons, College Park Ford, in College Park, Maryland. He said it should be 26 on the front tires and 35 pounds per square inch on the rear tires. Now, that is a range from 26 to 35, with three different answers from three different groups.

Consumers deserve better than that. There ought to be one answer to that question for what I hope is the relatively short period of time remaining before all of them are off the road and are dealt with more safely, so I think we not only have to look backwards at fault here, we have to look forward as to how prompt this response is for everyone and what people should be doing right now, today, to at least have the maximum degree of safety.

Senator SHELBY. Senator Mikulski.

STATEMENT OF SENATOR BARBARA A. MIKULSKI

Senator MIKULSKI. Thank you very much, Mr. Chairman. I would like to thank you and Senator Lautenberg and Senator Byrd for organizing this hearing. I know that the interest of security and safety have always been number one in your own priorities and, really, that is what the American people expect of us in a democracy. The safety and security of our people have always been a national priority.

That is why we have a whole national security system. That is why we have the Center for Disease Control to be on alert if infec-

tion is making its way into our country, and we have our Border Patrol also to see about what other problems are coming into our country, and yet where has been the alerts right now for something as known internationally as the failure of these tires to perform?

The American people have a right to know about risk. They have a right to know about danger. They have a right to know from both our Federal agencies and those who manufacture products where are the risks, and they have a right to be protected. How can we protect them from these dangers, or at least protect them with the information so that they can take their own action?

That is why we are holding this hearing today. People have a right to know. They have a right to be protected. They have a right to expect from their elected officials that we are standing sentry on this, so as we proceed with this hearing, both listening to Firestone and Bridgestone and also to our Federal regulators and the advocacy groups who take this interest, I want to have the answers to the questions about what are the alerts that we should have been paying attention to, what are the early warning mechanisms, both here and around the world, that would alert us to this? Who knew about these dangers, when did they know it, and what the heck did they do about it?

Now, our national security has a radar system that tells us when risk, or that we are facing risk in our own country. The Centers for Disease Control know when there is an international alert about an infectious disease so that we can notify every State health department to take the action to be able to alert people and protect them.

Why, then, when internationally there was the collapse of these tires going on in Venezuela, Saudi Arabia, 15 other countries taking action, the manufacturer chose not to notify the U.S. Government, and the U.S. Government did not have the same radar system we have for national security, or did not have the same kind of mechanisms in place to alert us to infectious disease?

Now, we are as much at risk from faulty tires, and in fact I do not know when I am going to be exposed to Ebola, but I do know that I get in my car every day to travel here from Baltimore, so I want to be sure, then, that we have these mechanisms in place.

We look forward to this testimony to really get at the facts and at the same time put the mechanisms in place, but I am deeply disturbed that something that is a manufactured product did not have the same early warning and alerts that we have for a foe penetrating America's borders, or an infectious disease.

So Mr. Chairman, I look forward to the testimony, and the hearing.

Senator SHELBY. Senator Specter.

STATEMENT OF SENATOR ARLEN SPECTER

Senator SPECTER. Thank you, Mr. Chairman. First, I commend you, Mr. Chairman, for scheduling this hearing so promptly. I know you returned late last night from oversight responsibilities you have as chairman of the Intelligence Committee, and this is a very, very important hearing, with the first focus trying to see to it that safety is assured at this moment for all those who are in

jeopardy because of these tires, and beyond that to prevent the recurrence of this situation for the future.

To do that we are going to have to conduct some very incisive investigation to find out how we got here. Every day, all of us entrust our lives to our tires. Yesterday I was on the Pennsylvania turnpike going 65 miles an hour, relying on my tires, concerned about who might be coming in an opposite direction where they might have Bridgestone/Firestone tires, so the safety issue is one which affects absolutely all Americans.

When you, Mr. Chairman, said that at a minimum there was a moral obligation on the part of Firestone, that states a very minimum obligation. Their obligation is to act responsibly and when corporate officials know there is a danger which might cause the loss of life or serious bodily injury and they permit that situation to continue, that is a reckless disregard for the life of another, and that is equated in the law with malice, and that rises to the level of second degree murder, where individuals knowingly allow a danger to exist which results in the death of another.

This regrettably is not an infrequent occurrence in corporate America today as to what happens when there are dangerous products which are put up for public consumption, but with the number of deaths involved here, and with the automobiles being involved and the reliance that each of us places on our tires every day, it has been brought home with a very high level of drama to the American people, and the people of the world.

So far most of what is known is from the media, and we need to get the hard evidence, but the media reports that in Saudi Arabia there was a recall of tires but it was kept secret from the American Government and from the American people. How in the world can corporate officials allow a danger to go forward in the United States when they are looking after the Saudis?

We know from the media that Venezuela is considering criminal prosecution against the corporate officials who were involved in this matter on homicide charges. Well, Venezuela may have some problems on extradition, but the United States does not have any problems in terms of a Federal or State prosecution if, in fact, what we read about turns out to be true, and we have this reckless disregard for the lives of others.

I do not know about the press reports, but it is worth commenting that the media reports have said that the president of Ford is not going to testify. We have another Ford executive here today. Well, it seems to me that we ought to hear in the Congress from the top officials who are responsible for what is going on.

It is hard to turn on my television set these days without seeing the president of Ford on TV making a commercial announcement. It is pretty hard to squeeze in with all the other commercial announcements we have in the political campaign, but if any official of any company thinks that they are not going to appear before a congressional committee, they ought to check their rules about subpoenas, and we ought not to be reluctant at all to issue subpoenas to bring those people in.

And today in the Washington Post I read about a document—it is nice to read about documents in the Washington Post, contrasted with having the companies turn those matters over to the Appro-

priations Committee which is holding this hearing, but we have a duty to get the documents, and this is a long paper chase. The trial lawyers engage in it all the time, and I know the very high regard my colleagues, especially Senator Domenici, has for trial lawyers who undertake these paper chases to get these documents but we will not find out all the facts until we get all of the documents.

So, Mr. Chairman, I think we have begun a very long, important, and difficult process here which has enormous implications for the American people and the people of the world. All of us rely on our automobiles and therefore on our tires, and in terms of what the manufacturers and corporate executives do to subject consumers to these kinds of risks, so I am delighted you have started these hearings just a few hours after your return to Andrews, and that we will conduct the kind of incisive investigation and hearings necessary to correct this very major problem.

Thank you, Mr. Chairman.

Senator SHELBY. Senator Domenici.

STATEMENT OF SENATOR PETE V. DOMENICI

Senator DOMENICI. First, I want to thank you, Mr. Chairman, thanks for calling these hearings. I hope those that are going to testify today understand that each of us at the outset have to say a few words. They will soon find that we are really interested in finding out what they know and what happened.

I agree with almost each statement as I hear it, that Senators would very much like to get to the bottom of how this happened, who was told, and when. I would like to know why were some told in advance of others. With that I will just tell you about my little State of New Mexico.

Many of you know that New Mexico has pretty hot weather, yet I learned that we were not among the States for early recall because we were not hot enough. Somebody called to their attention the kind of weather we have, and then New Mexico did go back up into the list where they could perhaps get some tires into the hands of those people that were entitled to a recall.

I will tell you, however, in the city of Santa Fe there are 400 people waiting for replacement tires on the list at one dealership. Nobody knows how long that will take to get through the list. Can you imagine what the people are going through in terms of the mental anguish as they wait?

I surmise that thousands of them are going to buy tires with their own money, and I think that leads to an interesting question. Should we ask whether or not they are going to recompense these people who, out of fear of waiting too long, have gone out and bought some other tires? Are they just going to be left there to have two sets of tires, or will something be done about that?

I am interested in knowing how the companies intend to handle situations like the ones I am describing. As everyone knows, there is one thing we have not spoken of that we should all be concerned about, and that is, this is back-to-school time, right in the middle of parents getting all geared up to take their kids to soccer games, to take them to school. Here we have just put upon top of them this anguish about their car and tires, especially if it happens to

be one of the cars we are talking about as being most susceptible to this problem.

I do not know where this all ends, but I want to close by suggesting to all of those involved on the corporate side, the end will come quicker, smoother, and be better, the sooner you tell us what happened. The sooner you tell us how this all occurred in an honest, bona fide tones, in words that will not be disputed by someone else, the better off the companies are, and certainly from the standpoint of doing our job, the better off we will be and things will come to a conclusion. It has got to come to a conclusion, and we hope the best possible conclusion. If you start today by not fudging the facts, not putting them off on somebody else, but clearly telling us just exactly what happened.

Now, I close by saying I do not know what Senator Specter had in mind when he spoke of trial lawyers, but I used to be one. I have not been doing that for a long, long time, and sometimes I feel very deficient sitting alongside of you, since you have been such a great prosecutor.

Thank you very much, Mr. Chairman.

Senator SHELBY. Thank you.

Senator Specter raised the point, and I think it is a valid one. The CEO of Ford is not here. They have sent, I understand, the executive vice president instead. I would rather have both of the most senior executives here, and I think it is the least they could do testifying here before the U.S. Senate.

Our first panel this morning includes Joan Claybrook, president of Common Cause, and David Pittle, senior vice president and technical director, Consumers Union.

Our second panel will include Dr. Sue Bailey, the Administrator of NHTSA, Mr. Masatoshi Ono, Chairman and CEO, and Mr. Gary Crigger, executive vice president of Bridgestone/Firestone, and Helen Petrauskus, vice president of environmental and safety engineering for Ford Motor Company.

Ms. Claybrook and Mr. Pittle, your written testimony will be made a part of the record in its entirety. You can proceed as you wish, Ms. Claybrook.

STATEMENT OF JOAN CLAYBROOK, PRESIDENT, PUBLIC CITIZEN

Ms. CLAYBROOK. Thank you, Mr. Chairman. It is a pleasure to be here today. I am Joan Claybrook, president of Public Citizen, a national public interest organization founded by Ralph Nader in 1971, and I am pleased to accept your invitation to testify about the Firestone tire that has resulted in 88 people being killed as of last week—the data from the Department of Transportation—and 250 people being injured.

I was the Administrator of the National Highway Traffic Safety Administration when the Firestone 500 tire defect occurred, and I brought a picture just to show you that it is quite similar. This is not a problem that this company has not faced before.

Much has been written in the last month about the lethal combination of Ford Explorers and Firestone tires. This is a design defect that is exacerbated by the fact that Ford required a low inflation pressure because of roll-over problems with these vehicles. Firestone tires inflated at 26 psi overheat with heavy highway use,

causing the tread to separate and the SUV's to crash, not infrequently rolling over and causing catastrophic and fatal injuries.

I would note that with the 500 tire, which also shredded, they were on cars and they did not tend to roll over. There is no margin of safety in the design here, where you have a bad tire and a vehicle vulnerable to roll-over, and that is a major reason why we are having so many injuries and deaths. The tragedy is teaching the public as well as policymakers a number of lessons, and I would like to comment on five issues, briefly, and make five recommendations for more effective enforcement of the Nation's motor vehicle safety defect laws.

SAFETY PROBLEMS COVERED UP

First, Ford and Firestone covered up the safety problems with the tire/SUV combination for a decade. The coverups will continue without corrective action by the National Highway Traffic Safety Administration. Rather than go through a long chronology I will just say that——

Senator MIKULSKI. Ms. Claybrook, there is a buzz in the room. Would you pull your microphone much closer?

Ms. CLAYBROOK. Can you hear me now?

Senator MIKULSKI. Yes.

Ms. CLAYBROOK. Ford first offered this vehicle, the Ford Explorer with Firestone tires, for sale in March 1990, and Ford internal documents show that the engineers recommended changes to the vehicle design after it rolled over in company tests prior to production of the vehicle, and there were a few changes made, but the track width was not made wider, and the suspension was not corrected as recommended.

Instead, Ford, which sets the specifications for the tires manufactured by Firestone, decided to remove the air from the tires, lowering it to 26 psi, and if you look, I brought some tires here which I will mention in a few minutes, but if you look at the psi molded into the side of the tire, the maximum load carried is 35 psi recommended by Firestone.

The Firestone—excuse me. Within a year of introduction, lawsuits against Ford and Firestone were filed for tire failures that resulted in crashes and roll-overs. At last five cases were filed by 1993, and many others followed in the 1990's. Almost all were settled, and they were settled with gag orders, orders prohibiting the lawyers and the families from disclosing information about the cases or documenting it to the public or the Department of Transportation.

When lawsuits are filed against a company about a safety defect again and again, the company organizes an internal investigation to assemble the information and analysis of the information. Top company officials are kept informed about lawsuits against the company, particularly as they accumulate. There is no question that the companies knew they had a problem, but they kept it secret.

Just one example has come to light through the press. In 1996, several State agencies in Arizona began having problems with Firestone tires on Explorers and, according to news reports, these agencies demanded new tires. Firestone conducted an investigation,

tested the tires, and asserted that the tires had been abused or underinflated, and this has been the mantra for the problem.

In 1998, as many of you mentioned, Ford and Firestone were in discussions about tire failures abroad and did, in fact, conduct recalls, or Ford did conduct recalls abroad, and the memo that has just come out shows that at least Firestone believed that there was a legal obligation on behalf of the company if they did a recall abroad they had to notify the Department of Transportation, and I believe that that is accurate.

There is a legal argument that the Department of Transportation has no extraterritorial authority, but this was a company in the United States, or two companies doing an action abroad with the identical tire and identical vehicle manufactured and sold here that they were recalling abroad.

And as you mentioned also last week, Indecu, the Venezuelan regulatory agency, said that Firestone and Ford, quote, "met to plan out ways of a situation that was affecting their commercial interest at the price of causing damage, destruction, and death", and is recommending possible criminal enforcement for involuntary manslaughter.

NHTSA NEEDS ADDITIONAL LEGISLATIVE AUTHORITY

Incidentally, there are a number of parallels between the 1978 recall and Firestone 500. I would say that one of them is that the information was kept secret from the Department of Transportation for a long time. My second point is, NHTSA needs additional legislative authority to ensure the manufacturers obey the law, report safety defects, and recall unsafe products.

The agency has sent forward some legislation which I think is excellent, but it needs to be improved. They want to increase civil penalties. Right now the maximum civil penalties for this agency is $925,000 for any company that refuses to recall a product. That is a joke. The maximum penalty for each violation is $1,000. It should be changed to $10,000, which it is at the Environmental Protection Agency.

There is no violation for withholding documents per day. I am sure Senator Specter, as a former prosecutor, is aware that you do a per-day violation. At NHTSA it is per document, so if a document is withheld forever, there is just one penalty of $1,000.

As in the Food and Drug Administration there should be criminal penalties for knowing and willful refusal to recall a defective part or withholding information. This was recommended after the 1978 recall.

As recommended in NHTSA's proposed bill, the company should be required to test its products before self-certification. Right now, companies do not have to do a test before they self-certify compliance with the agency standards.

The statute of limitations right now is 8 years for a vehicle and 3 years for a tire, for NHTSA to be able to mandate a recall. It should be extended to 10 years for vehicles and 5 years for tires. There has been a substantial change since the 1970's when this was enacted in the length the tires are used on the highway.

I have already mentioned the issue about sending notices to NHTSA for foreign recalls. The agency's budget needs to be larger.

Ninety-four percent of the deaths occur on the highway, and yet NHTSA has a tiny percentage of the transportation budget. Although it has been increased substantially in recent years, for which I thank this subcommittee very much, it is still 30 percent below in real dollars what it was when I left the agency in 1980, and the enforcement budget is about one-half of the 1980 budget. There are fewer than 20 engineer investigators who work on safety defects for the entire United States of America.

ATX TIRE RECALL SHOULD BE EXPANDED

Third, Firestone and Ford should recall all of the ATX, ATX II and Wilderness tires to protect the public from this catastrophic defect, and all data and information should be made public to restore the public trust, and Senator Domenici has said this.

By the way, Senator Domenici, in your State you have a huge number of deaths and injuries. Are you aware of that?

Senator DOMENICI. Yes, I am.

Ms. CLAYBROOK. According to the Department of Transportation, 13 injuries and 9 deaths in your State, and I think that shows that you certainly should have been included in the recall early on. Much of the data that Ford has based its analysis of the claims data, which is how this recall was defined, is still not public, and for example, it does not—there is no indication of how many tires were made at which plant.

This seems to be a wear-related issue, that is that as the tires were on the road longer they are more likely to have the problem, and the data was as of the end of April 2000, so there is a lot of information that has developed since then that should be available for this analysis. It also only uses claims data that is for claims of injury, death, or property damage. It does not include warranty claims or adjustment data, and it does not include information that has come in since, now known by NHTSA.

NHTSA has last week analyzed the data that it has from complaints and lawsuits and injuries from Firestone and Ford and determined that the recall should be extended to another 1.4 million tires, and that additional ones are being investigated as well.

There is every indication that this problem is a design defect that affects all the tire produced. In the Firestone 500 case the company at first asserted that only 400,000 tires were defective from the Decatur plant, and then on further evaluation it was realized that there were 14 million tires that should be subject to the recall.

Also, an analysis that was released last Friday of 90 lawsuits that have been filed in this issue showed that about 37 percent of them covered the nonrecalled tires, and I have here today two tires. This is the 15-inch tire and this is the 16-inch tire, and you can see that the tread separation is about the same with both. The 16 is not being recalled, the 15 is, and you can examine those for yourself to see how similar the tires are.

There are also a number of documents that Senator Domenici mentioned. We should have all the information. There are a number of documents that are still secret. The companies asked for confidentiality at NHTSA on a number of documents that I think should be made public, and also the gag order documents protective order documents should be made available. The agency has sub-

poena power. It can get the information from the gag orders, and I would urge that that occur.

NHTSA'S DEFECTS INVESTIGATION PROGRAM

Fourth, NHTSA has failed to discover this defect because it lacks a proactive program to discover safety defects. I believe the agency was caught flat-footed because it rarely pushes companies to do recalls in an aggressive way. The manufacturers rolled the dice in this case and covered it up. They usually win, and in this case they did not.

NHTSA has no early warning system in place and has not been proactive in using available sources of information. They should routinely get information from auto repair facilities, which we did in the 1970's, complete owners and national State and local fleets, from lawyers representing deceased and injured family members who find out about defects in discovery through cross-examination of the manufacturers, from insurance company data, which the chairman has already mentioned comes in to them from time to time but is not aggressively sought, and you have already mentioned State Farm, which I will not elaborate on any more.

The agency should require, as does the EPA, that a company notify the agency if it gets 25 complaints about a particular make or model defect, and it should require, as does the CPSC, that a company notify the agency if there are three or more lawsuits filed against it on the same subject. These efforts would give the agency an early warning system. They would have their finger on the pulse beat of what is happening out there on the highway.

In short, NHTSA has not been the tough cop on the regulatory beat, and when it is the companies are more safety conscious, the public is protected and, in the end, there is less work for all parties. The Firestone/Ford case shows what happens when safety is not job 1 in this industry or in the Government.

SAFETY STANDARDS

My fifth recommendation is that essential safety standards are severely out of date, were scrapped during the Reagan years, or prohibited because of industry lobbying to change the law.

I will go through these very briefly. The tire safety standard is 32 years old, and is not effective for testing radial tires. It was written during the days of the bias ply tire. Both Ford and General Motors have recently stated they favor improving this standard.

Number 2, the uniform tire quality grading standard is molded on the tire for tread wear traction and heat resistance does not apply to SUV tires. It only applies to car tires. It should be expanded to do so. The roof crush standard is 30 years old. I do have an example from the morning paper which you probably have all read which shows what happens to the roof when one of these vehicles rolls over. The roof just crushes in, and I also have a picture of one that is not quite as crushed in. This is not necessary.

Let me tell you what the standard says. It is a static standard, and it says that if you place weight on the roof of the vehicle that is one-and-a-half times the unloaded weight of the vehicle, it passes the test. There is no dynamic test. You do not have to roll the vehicle over in any way, and of course this has caused a number of the

deaths. A dynamic roll-over standard should be adopted, a roof crush standard.

A roll-over standard has not existed in this agency. It has been a topic for 15 years, since Representative Timothy Wirth submitted a petition in 1985, and others have followed. In 1991, the Congress required NHTSA to conduct a roll-over prevention rulemaking. It made an initial effort to put in a consumer information requirement and a proposal, then the Appropriations Committee said there should be a study at the National Academy of Sciences. That study was finished in 1996.

Finally, the agency a couple of months ago proposed another one, a static standard, which is a very simple standard. The auto companies say it is not adequate, so once again another study has been proposed. This bill is now in conference.

Our coalition of consumer health and insurer groups and insurers favors dropping the study and letting NHTSA issue this test as a first effort. The consumers have said to the Harris Poll that 62 percent want such information, but we also want a rollover prevention standard. As has been mentioned, 25 percent of all highway deaths occur in rollovers, and SUV's have a particular susceptibility.

The agency should issue a rule for a tire inflation indicator, as I proposed 22 years ago, on the dashboard that just alerts the consumer if their tires are low on inflation. The companies complain that people do not properly inflate their tires, but most people do not know, and those little measuring tools that people have are often inaccurate.

Tire manufacturing information are molded into the blackwall inside of the tires. It should be on the outside whitewall of the tires so that the consumer does not have to crawl under the tire to find out if the tire has been recalled, and right now that is what they are having to do, and it is a simple thing to do.

The tire reserve load consumer information requirement was eliminated in the eighties. It should be reestablished to inform consumers of the maximum rated low capacity of the vehicle so they can know when they should inflate their tires to the maximum load rating, which is molded into the side wall. The agency should be alert in this case as to whether its current requirement of 5 years for record retention is sufficient, given that this is a decade-long case.

I have three minor pieces of legislation that I would also recommend. One is that independent tire dealers should have to report the names and addresses of buyers to the manufacturer. That was eliminated in 1982. Second, the current law requires tire owners to return their tires within 60 days of a recall or 60 days of availability of the tire. It is not fair for car buyers. I think it should stay in the law. It is very confusing.

And finally, the current prohibition in the law on the NHTSA rule requiring a continuous buzzer alert. It stops NHTSA from requiring a continuous buzzer. It can only be 4 to 8 seconds. Ford Motor Company, I commend them, it has a longer buzzer for rollover crashes. That is critical.

Thank you very much, Mr. Chairman, for tolerating my long statement.

[The statement follows:]

PREPARED STATEMENT OF JOAN CLAYBROOK

Mr. Chairman and Members of the Committee: I am pleased to accept your invitation to testify today on the Firestone tire defect that has killed at least 88 and injured 250 people, most of them in Ford Explorers. I am President of Public Citizen, a national public interest organization founded by Ralph Nader in 1971 with 150,000 members nationwide. I served as Administrator of the National Highway Traffic Safety Administration from 1977 to 1981. This agency is responsible for administering the recall of the Firestone tires. The Firestone 500 recall occurred when I was Administrator.

Much has been written in the past month about the lethal combination of Ford Explorers and Firestone tires. This is a design defect exacerbated by the fact that Ford required a low inflation pressure because of rollover problems with these vehicles. Firestone tires inflated at 26 psi overheat with highway use, causing the tread to separate and the SUVs to crash, not infrequently rolling over and causing catastrophic and fatal injuries. This tragedy is teaching the public as well as policymakers a number of lessons. I would like to comment on five issues and make recommendations for more effective enforcement of the nation's motor vehicle safety defect laws.

Ford and Firestone covered up safety problems with the tire/SUV combination for a decade. Coverups will continue without corrective action by NHTSA.

The Ford Explorer was first offered for sale in March 1990. Ford internal documents show the company engineers recommended changes to the vehicle design after it rolled over in company tests prior to introduction, but other than a few minor changes, the suspension and track width were not changed. Instead, Ford, which sets the specifications for the manufacture of its tires, decided to remove air from the tires, lowering the recommended psi to 26. The Firestone recommended psi molded into the tire for maximum load is 35 psi.

Within a year of introduction, lawsuits against Ford and Firestone were filed for tire failures that resulted in crashes and rollovers. At least five cases were filed by 1993, and many others followed in the early 1990s. Almost all were settled, and settled with gag orders prohibiting the attorneys and the families from disclosing information about the cases or their documentation to the public or DOT. When lawsuits are filed against a company about a safety defect, the company organizes an internal investigation to assemble information and analysis about the allegations. Top company officials are kept informed about all lawsuits against the company, particularly when they accumulate concerning one problem. There is no question the companies knew they had a problem. But they kept it secret.

In 1996, several state agencies in Arizona began having major problems with Firestone tires on Explorers. According to news reports, various agencies demanded new tires, and Firestone conducted an investigation of the complaints, tested the tires and asserted that the tires had been abused or under-inflated.

In 1998, Ford and Firestone were in discussions about tire failures with Middle Eastern, Asian and South American countries. Tires were tested and analyzed. Ford eventually decided to conduct its own recall without Firestone and replace the tires in the various countries in 1999 and 2000. It also instructed Firestone to add a nylon ply to the tires it manufactured in Venezuela for additional strength and it made suspension changes to the Explorer. Ford did not specify adding the nylon ply for U.S.-made Firestone tires nor did it change the Explorer suspension at this time. In May, a top Ford official in Venezuela was quoted in the press as saying the company was replacing the tires because in Venezuela "the highways allow drivers to travel at high speeds for a sustained period of time, leading to the loosening of the rolling surface of the tire, its consequent blowout and the accident."

Last week, the Venezuelan safety regulatory agency, Indecu, concluded after an investigation that Firestone and Ford "met to plan ways out of a situation that was affecting their commercial interests, at the price of causing damage, destruction and death," and is recommending possible criminal enforcement for involuntary manslaughter. Neither Ford nor Firestone informed the National Highway Traffic Safety Administration of this recall, euphemistically labeled a "No Charge Service Program Award Notification."

Incidentally, there are a number of parallels between this recall in 2000 and the 1978 recall of the Firestone 500. Most particularly, there was a documented coverup by Firestone of the 500 defect, spurred by the lack of a Firestone replacement tire. When the coverup was disclosed, the top management of the company was replaced as Firestone was severely damaged in reputation and economically. But a key dif-

ference is that the Firestone 500 was used on passenger cars, which rarely rolled over with tire failure. NHTSA documented 41 deaths with the 500, a recall, involving seven million tires.

Once again, when confronted with accusations about the performance of the tire, Firestone has misleadingly claimed owner abuse (i.e. under-inflation, rough use or improper repairs).

The National Highway Traffic Safety Administration needs additional legislative authority to assure that manufacturers obey the law, report safety defects and recall unsafe products.

To prevent coverups of safety defects in the future, the National Traffic and Motor Vehicle Safety Act should be amended. In March 2000 the agency sent legislation to the Congress which would make some improvements, but additional authority is needed. The Congress should:

a. Increase civil penalties for failure to recall a defective vehicle or part or withholding information from the agency. Now the maximum penalty is $925,000, hardly a deterrent for multinational corporations. The penalty for each violation should be increased from $1,000 to $10,000 (as at the Environmental Protection Agency); the violation for withholding documents should be per day rather than per document as it is now (no matter how long it is withheld). There should be no maximum penalty.

b. As in the Food and Drug Administration and the Environmental Protection Agency laws, there should be criminal penalties for knowing and willful refusal to recall a defective vehicle or part or for withholding information that results in deaths and injuries. Chairman John Moss, after reviewing the Firestone 500 debacle, recommended criminal penalties be added to the NHTSA statute.

c. As recommended by NHTSA's proposed bill, a company should be required by law to test its products before self-certifying for compliance with the agency's standards. Such testing is not now required by law.

d. The statute of limitations for NHTSA to mandate a recall is now eight years for vehicles and three years for tires from the date of manufacture. It should be extended, as the agency recommends, to 10 years for vehicles and five years for tires.

e. There is disagreement about whether the current law requiring manufacturers to send NHTSA copies of all notices sent to dealers and owners about a defect is applicable in this case. Ford sent notices to foreign dealers about a defect in a product made and sold in the U.S. and also sold abroad. Does the fact that the notice was sent to foreign dealers negate Ford's responsibility to notify NHTSA? I don't think so, but certainly the law should be clarified that this is a company's responsibility in this age of globalization.

f. NHTSA's budget needs to be larger, particularly for enforcement. Ninety-four percent of transportation deaths occur on the highway, yet NHTSA has only a tiny percentage of the Transportation budget. Although it has been increased in recent years, and I thank this Subcommittee for that, it is still 30 percent below, in real dollars, what it was when I left the agency at the beginning of 1981. Its enforcement budget is about one-half of the 1980 budget. It has fewer than 20 engineer/investigators working on vehicle safety defects for the entire country.

The Firestone/Ford recall should be expanded to cover all ATX, ATX II and Wilderness tires to protect the public from this catastrophic defect, and all data and information should be made public to restore public trust.

Much of the data on which Ford based its analysis of Firestone claims data is still not public and subject to outside scrutiny (such as how many tires were made at each plant and when—an important factor since the defect appears to emerge after two to four years of use), and it is based on information through April 2000. None of the recent information that has been pouring into the companies and NHTSA as the public is getting informed about the problem is included. It also covers only claims data—claims for compensation for injury or property damage. It does not cover warranty claims or adjustment data for tire failures. It also does not cover any information known to Ford (although there will be duplication between Ford and Firestone data). It also does not cover new information now known by NHTSA about claims.

NHTSA last week analyzed data (complaints, lawsuits, injuries, including information submitted to date from Ford and Firestone) and determined that the recall should be enlarged to cover another 1.4 million tires. NHTSA said it is still investigating to determine if the recall should be enlarged further. It issued a consumer advisory because Firestone refused to enlarge the recall, an indication of Firestone's attitude toward a safety defect that gives the consumer no warning and can result in death and severe injury when the vehicle is operated normally. This same attitude was evident in Firestone's offer made on August 16 in public newspaper ads

that it would reimburse owners who bought other tires, but the offer ended on August 16. Had it not been for a temporary restraining order issued by a federal judge in Louisville preventing the company from discontinuing the one-day offer, Firestone might have faced a massive consumer revolt, picket lines, more consumer lawsuits and more disputes with its largest customer, Ford Motor Company, which is pressing to get the tires replaced quickly with tires from other manufacturers as well as Firestone.

There is every indication that this problem is a design defect that affects all the tires produced. In the Firestone 500 case, the company at first asserted that only 400,000 tires were defective, those produced in the Decatur plant. But during NHTSA's investigation, as more data was available and company documents were secured and analyzed, we found that the tread separation on the 500 was a design performance defect. The company knew about it for at least three years and never informed NHTSA, and it was at the same time making running changes on the production line to correct the problem in new tires.

There are other indications that the companies should expand the recall. An analysis released last Friday of about 90 lawsuits or claims about to be filed showed that 37 percent covered non-recalled tires. In several of the foreign recalls, 16-inch tires were included (but are not recalled in the U.S.).

There are a number of documents and data that are still secret, either in submissions by the companies to NHTSA or gag orders in lawsuits that should be made public. This may be painful for the companies, but it is essential given the broad public debate about this defect and the need for the companies to regain public trust. This information will probably leak out over time anyway, so it makes sense to release it now.

NHTSA failed to discover this defect because it lacks a proactive program to discover safety defects.

a. NHTSA was caught flatfooted because it rarely pushes companies to obey the law. The Department allowed GM to resist recalling its 5 million defectively designed pickup trucks with side-saddle gas tanks that explode in side-impact crashes, and Ford to resist recalling its vehicles equipped with ignition modules that frequently failed, causing vehicles to stall. It allowed Chrysler to label its correction of its minivans with defective rear-door latches that pop open in rear crashes, (throwing occupants outside), a "service campaign" and not a safety recall. And it rarely imposes penalties when it learns companies have slithered around its request to produce documents.

The auto manufacturers have rolled the dice in this coverup and usually win. This time they are the losers as the media spotlight forces the story of the sorry state of manufacturer compliance with the law and safety defect enforcement into the public consciousness.

b. NHTSA also has no early warning system in place and has not been proactive in using sources of information that are on the pulse-beat of current information about vehicle performance. They can and should routinely get information from: auto repair facilities; fleet owners, including national, state and local fleets; lawyers representing deceased and injured family members who find out about defects through discovery and cross examination of manufacturers; insurance company data; and also from the companies themselves.

In this case, State Farm Insurance Co., the nation's largest insurer, sent an E-mail and called NHTSA in 1998 about 21 cases of Firestone tire tread separations, but the agency ignored it. Another 30 cases were sent in 1999, and the agency ignored them as well. How could this happen? How often does the agency check complaints dutifully filed by consumers through its hotline and in letters to spot trends? They are all on a computer list by make, model, and alleged defect. Even if this happens routinely, it's not enough—as this case illustrates, because most consumers don't bother contacting government agencies.

The agency should require, as does EPA, that a company notify the agency if it gets 25 complaints about the same alleged defect, and require, as does CPSC, that the company notify the agency if three or more lawsuits alleging the same safety defect are filed.

The agency has also used a highly inappropriate system for evaluating whether a safety defect exists, looking at statistical data which are rarely adequate. If it cannot establish a statistical basis, the agency does not find a defect. The courts have held in a number of cases that if a safety element of the vehicle fails and can kill or injure, there is a failure of safety performance sufficient to find a defect, and there is no need to find dead bodies on the highway first.

In short, NHTSA has not been the tough cop on the regulatory beat. When it is, the companies are more safety-conscious, the public is protected, and in the end it

is less work for all parties. The Firestone/Ford case shows what happens when safety is not Job 1 in the companies or in the government.

Essential safety standards are severely out of date, were scrapped or delayed in the Reagan years, or are prohibited by law because of industry lobbying.

a. The tire safety standard is 32 years old and not fully effective for testing radial tires. Both Ford and GM have recently stated they favor an improved standard. The current standard tests for strength, endurance and how well the tire remains on the rim. Radial tires last much longer than bias ply tires and should be subjected to a tougher standard.

b. The Uniform Tire Quality Grading standard applies only to car tires, not truck/SUV tires. It is a consumer information requirement rating tread wear, traction and heat resistance with the rating molded into the tire. It should be expanded to cover truck/SUV tires.

c. The roof crush standard is 30 years old. It is a static standard requiring weight to be placed on the roof of the vehicle (applied to SUVs beginning in model year 1994) equal to 1.5 times the maximum unloaded weight of the vehicle. In many of the Ford Explorer/Firestone rollover cases, the roof crushes into the vehicle, severely enhancing the likelihood of injury and death. A dynamic rollover crash worthiness standard should be issued addressing roof crush, door lock and hinges, side glazing materials and head protection. Crash protection in rollovers must include effective safety belts with pretensioners.

d. The first petition to NHTSA for a rollover prevention standard was filed by Representative Timothy Wirth 15 years ago. Others followed. In 1991 the Congress required NHTSA to conduct a rollover prevention rulemaking. The agency made an initial effort at developing a safety standard, but then dropped it and instead proposed a consumer information requirement. The auto industry then got the Appropriations Committee to prohibit issuance of a consumer information rule until after a study by the National Academy of Sciences about the usefulness and presentation of consumer information. Finally in May 2000 the agency proposed to conduct New Car Assessment tests for rollover based on a static measurement of track width and center of gravity height, but once again the manufacturers objected and the Appropriations Committee has placed a requirement for yet another study by the NAS before it could be issued. This bill is now in conference.

Our coalition of consumer and health groups and insurers favors dropping the study and letting NHTSA issue the consumer information test. A 1998 Harris poll conducted for Advocates For Highway and Auto Safety show 62 percent of the public wants such information. But we also want a rollover prevention standard. It is long overdue. About 9,500 highway deaths annually occur in rollover crashes—almost 25 percent of all highway deaths. This problem must be addressed, particularly with the advent of SUVs with their susceptibility to rollover.

e. The agency should issue a rule for a tire inflation indicator on the dashboard, as I proposed 22 years ago. It was eliminated by the Reagan administration. The companies complain that tires are not properly inflated but then lobby to undercut consumers' ability to properly maintain their tires with accurate information.

f. The tire manufacturing information now molded into the blackwall of the tire should be placed on the whitewall or outside of the tire so a consumer doesn't have to crawl under the car to find it. This was part of my rulemaking plan more than 20 years ago, but it was never issued after I left.

g. The tire reserve load consumer information requirement eliminated in the Reagan years should be reestablished to inform consumers of the maximum rated load capacity of the vehicle, so they know when they should inflate their tires for maximum load carrying.

h. The agency should be alert in this case to whether its requirement for record retention of only five years should be extended, since the critical evidence in this case extends over a decade.

i. Three elements of legislation are needed that are relevant to this case:

First, the 1982 legislation eliminating the responsibility of independent tire dealers to report the names and addresses of tire purchasers to the manufacturer for notification in the event of a recall should be changed back to requiring such record-keeping as during the period from 1970 until 1982. Independent dealers with computers today can readily supply such names to the manufacturer. The current law only requires the independent dealer to give the consumer a card to mail themselves. A 1986 NHTSA report showed only 11 percent responded. Thus, in this case, most buyers from independent dealers will not be notified by mail.

Second, the current law requires tire owners to return the tire within 60 days of a recall notification (which, I presume means if a manufacturer has no contact information, a consumer would have to rely on news reports) or 60 days after tire avail-

ability. Car owners in recalls don't have this limitation. It is confusing enough to get tires replaced without this added complexity. It should be eliminated.

Third, the current prohibition in the law on a NHTSA rule requiring a continuous buzzer to alert occupants to buckle up should be eliminated. Among car companies, only Ford, I believe, now has a continuous buzzer. The current law only permits NHTSA to require a four to eight second buzzer. Belt use is essential in rollovers. It should be encouraged in every way, including when the vehicle is in use.

Thank you Mr. Chairman for the opportunity to testify on this important subject today.

NEW MEXICO FIRESTONE TIRE ACCIDENTS

Senator DOMENICI. Mr. Chairman, I wonder since New Mexico was mentioned, if I could just give you the authentic totals, it takes just two paragraphs. According to the NHTSA the tires have been blamed for 10 accidents in my State, 9 deaths. That is in New Mexico, including a husband, wife, and her unborn child who died when their Ford utility vehicle flipped four times and crashed outside of the little town of San Antonio, New Mexico. Of these accidents, 9 out of 10 involved Ford Explorers, and 7 out of 10 resulted in the vehicle rolling over more than one time; 5 of 7 of the rollover accidents caused fatalities.

So that is a State with a population of about 1.6 million. Clearly, if that occurred across this Nation it would be absolutely enormous.

STATEMENT OF DAVID R. PITTLE, SENIOR VICE PRESIDENT AND TECHNICAL DIRECTOR, CONSUMERS UNION

ACCOMPANIED BY:

DAVID CHAMPION, DIRECTOR, AUTO TEST CENTER, CONSUMERS UNION

SALLY GREENBERG, SENIOR PRODUCT SAFETY COUNSEL, CONSUMERS UNION

Senator SHELBY. Mr. Pittle.

Mr. PITTLE. Thank you, Mr. Chairman, distinguished members of the committee. Good morning. My name is David Pittle, and I am the technical director of Consumers' Union, publisher of Consumer Reports magazine. We applaud you for holding this hearing to discuss two serious consumer issues, one being the recall of the Bridgestone/Firestone tires on Ford light trucks and other sports utility vehicles, and to discuss in some detail NHTSA's proposed information program for comparing the emergency handling and stability of SUV's.

Senator SHELBY. Mr. Pittle, could you bring the mike a little closer to you?

Mr. PITTLE. Sure.

With me today are David Champion, director of Consumers Union 327-acre auto test center in Connecticut, and Sally Greenberg, senior product safety counsel here in Washington.

CU conducts comprehensive tests of more than 40 new motor vehicles each year and provides consumers with ratings about the performance, handling, efficiency, comfort, stability, and safety of these vehicles. CU also tests tires each year for their breaking, handling, cornering, and tractioning characteristics on new, wet, snow-covered and ice-covered surfaces. We do not conduct long-term durability tests of the kind done by NHTSA.

Each month an estimated 17 million consumers read and consider our published test reports, ratings, and buying advice as they

ponder their choices. Product safety has long been an overriding concern for CU and, in particular, roll-over stability, and over the past decade has become a top priority for the car-buying public as well.

We have learned from more than six decades of conducting unbiased laboratory tests and consumer use tests that products that look alike do not always act alike. That principle certainly holds true for motor vehicles and automotive replacement parts. To make sound buying decisions the American consumer needs reliable objective information about product performance and quality to help him or her make a rational choice from among competing products.

To many consumers, that also means buying safe products, ones that protect their families and do not present unreasonable risk. Here, the American consumer must be able to rely on NHTSA to set adequate safety standards and ensure their automotive products offered for sale meet those standards. Furthermore, if a product is found to be unsafe and defective it must be recalled promptly and effectively.

In short, NHTSA is the only economically disinterested entity that stands between the consumer and injury from an unsafe auto product. As charged by Congress, it is uniquely and singularly dedicated to protecting the public from automotive hazards often not seen, not measured, and not understood by the average consumer, but in the end consumers ultimately rely on Congress first to ensure that NHTSA has the resources and authority it needs to protect the public, second to use its oversight power to ensure the agency is fulfilling its mandate, and third to allow the agency to set safety regulations without being derailed because industry voices objections.

Against this background we would like to offer you several observations and recommendations this morning regarding the recall.

BRIDGESTONE/FIRESTONE RECALL

CU, like motorists across the country, was chagrined to learn that since 1992 there have been more than 50 lawsuits and possibly as many as 100 lawsuits related to the Firestone tire subject to the current recall. Many of the lawsuits were settled with protective orders in place, with the effect that critical safety information has been kept from the public.

The Senate has before it S. 957, Senator Kohl's bill, which requires courts to consider the impact on public health and safety before considering, or during consideration of the granting of such protective orders. CU believes that when a lawsuit is settled, information affecting public safety should never be allowed to be sealed and thereby kept from the public. If NHTSA does not now have the power to subpoena information affecting public safety within the confines of these protective orders, Congress should correct that shortcoming in their authority.

Ms. Claybrook says that is in place. That ought to be clarified. There is a lot of finger-pointing in both directions, and in the meantime nothing happens. The ever-increasing extent of the Firestone recall and allegations of previous protective orders shine a bright light on the charges and dangers that these orders have on the public health and safety. One cannot help but believe that if

this information had been opened to NHTSA and the press earlier, many of the tragic deaths and injuries from these tires would have been avoided.

LAW REGARDING FOREIGN NOTIFICATION UNCLEAR

Second, car and tire manufacturers are required to report to NHTSA within a few days when they discover an auto safety problem, but the law may be unclear for safety recalls that involve vehicles outside the United States. I do not know, but if there is an ambiguity in the way the statute can be read, that ambiguity should be clarified as soon as possible by Congress.

American consumers were understandably angered upon learning that the same vehicles they were driving and similar tires to the ones they were driving on were previously and quietly subject to safety recalls in other countries. We believe manufacturers must be required to share such recall information with NHTSA. Congress should either make changes to the statute, or direct NHTSA to amend its regulations to ensure that recalls in foreign countries are brought to NHTSA's attention promptly.

Third, Congress should take the opportunity to ensure that there are adequate deterrents to nonreporting of safety information by passing the administration's legislation calling for heavier fines for failure to report. We urge the committee to evaluate what level of fine will serve as a realistic deterrent to companies that manufacture products falling underneath its jurisdiction and that fail to report safety defects, recognizing that many of them are multibillion corporations.

CU believes NHTSA's legislation filed last year to increase the fines for failure to report is a step in the right direction. We are concerned that the levels are still too low to be an effective deterrent.

ROLLOVER TESTING

I would like to address the NHTSA proposal on roll-over information. That is a very important thing. CU has been involved in the roll-over testing and the controversy for many years. It is no surprise that these tire failures occurring on an SUV ultimately wind up in a crash that is a roll-over and the number of deaths is quite high, and that is unacceptably high.

While members of this committee may be aware that sports utility vehicles tend to roll over at a much higher rate than passenger cars, the motoring public does not sufficiently understand the full impact of this problem. Since 1973, CU has been conducting emergency avoidance maneuver testing of all vehicles, and since 1988 has been running avoidance maneuver tests to evaluate the stability of SUV's and other light trucks.

Both involve dynamic testing. That is, driving a vehicle through emergency maneuvers to evaluate its performance. In 1988, CU petitioned NHTSA to use a dynamic or driving test to set a safety standard for vehicle stability. NHTSA granted our petition, but gave up in 1994, stating that the resulting tests would impose too high a cost on SUV design.

In 1996, CU once again petitioned NHTSA, this time asking the agency to develop a dynamic test to evaluate the emergency han-

dling of SUV's, require that all SUV's be put through that test, and to make the test results available to consumers. NHTSA granted our petition in 1997, and thereby raised expectations that it would develop a dynamic test. Sadly, it did not.

CU's comments to NHTSA's proposal, submitted just 2 weeks ago, notes that after conducting a series of dynamic tests on just 12 vehicles NHTSA backed away from dynamic tests. Instead, it is proposing the use of a static measure known as the static stability factor as the basis on which to rate vehicles.

In our comments CU said, quote, "While we believe any information that helps educate consumers about roll-over has merit, after a thorough analysis of NHTSA's proposal we cannot, unfortunately, endorse NHTSA's decision to use only the static stability factor to measure rollover propensity," close quote, and we continued, quote, "CU believes that the value of the static stability factor to consumers is preferable to consumers having no information at all.

At the very least, it clarifies the fundamental differences between categories of vehicles, but it is not a satisfactory regulatory response to an important issue of auto safety. It is too crude a measure to reliably distinguish among models within the same class of vehicles," close quote.

Ladies and gentlemen, consumers are crying out for this kind of information. They are being promoted to buy these cars, and yet they cannot distinguish the unseen roll-over propensity of them. We urge NHTSA to continue to try to develop a dynamic test, and we have submitted a full copy of our comments to NHTSA to committee staff and ask that it be included in the record.

We have always been concerned about Congress preventing NHTSA from taking action that the agency deems necessary to promote highway safety. Nonetheless, when Senator Shelby introduced an amendment to the transportation appropriations bill to delay NHTSA's action until the National Academy of Sciences studied whether static stability factor is the best stability measure, we were at least pleased that the amendment also directed the NAS to study the benefits of dynamic testing, which we consider to be the most important factor, and to include consumer representatives in the NAS study.

Our own view is that dynamic test is the proper path to take, and we would only hope that any trip to the National Academy of Sciences is a short one.

In summary, CU believes that we are at a crossroads, and we need a change in direction. We are pleased that NHTSA finally has an Administrator. Dr. Bailey brings fresh leadership and an impressive set of credentials with a spirit of service to the consumer back at the agency.

We are also pleased that the committee, and particularly the chairman, has expressed a sincere interest in setting the agency back on a proper course, and no matter what you hear about public confidence in Government, consumers need and deserve a strong auto safety agency that has the will to act on their behalf. They need stronger standards, more vigorous attention to injury data, and a relentless commitment to recalling defective products.

Consumers Union stands ready to work with you and the committee members to bring about the sorely needed changes. Thank you.

[The statement follows:]

PREPARED STATEMENT OF R. DAVID PITTLE

Mr. Chairman, distinguished members of the Committee, good morning. My name is David Pittle, and I am the Technical Director and Senior Vice-President of Consumers Union (CU), publisher of Consumer Reports. We applaud you for holding this hearing to discuss two very important consumer safety issues: (1) the recall of Bridgestone/Firestone tires on Ford light trucks and other sport utility vehicles (SUVs), and (2) NHTSA's proposed information program for comparing the emergency handling and stability of SUVs. With me are David Champion, Director of Consumers Union's 327-acre Auto Test Center in Connecticut, and Sally Greenberg, CU's Senior Product Safety Counsel here in Washington.

CU conducts comprehensive tests of more than 40 new vehicles each year and provides consumers with ratings about the performance, handling, efficiency, comfort, stability, and safety of these vehicles. CU also tests tires each year for their braking, handling, cornering, and traction characteristics on dry, wet, snow-covered, and ice-covered surfaces. We do not conduct long-term durability tests of the kind done by the National Highway Traffic Safety Administration. Each month, an estimated seventeen million consumers read and consider our published test reports, product ratings and buying advice as they ponder their choices.

Product safety has long been an overriding concern for CU, and over the past decade, has become a top priority for the car-buying public as well. We have learned from more than six decades of conducting unbiased laboratory tests and consumer use tests that products that look alike don't always act alike. This principle certainly holds true for motor vehicles and automotive replacement parts.

To make sound buying decisions, the American consumer needs reliable, objective information about product performance and quality to help him or her make a rational choice from among competing products. To many consumers, that also means buying safe products, ones that protect their families and do not present unreasonable risks. Here, the American car-buying public must be able to rely on NHTSA to set adequate safety standards and insure that automotive products offered for sale meet those safety standards. Furthermore, if a product is found to be unsafe, it must be recalled promptly and effectively. In short, NHTSA is the only economically disinterested entity that stands between the consumer and an unsafe product. As charged by Congress, it is uniquely and singularly dedicated to protecting the public from automotive hazards often not seen, not measured, and not understood by the average consumer.

But in the end, consumers ultimately rely on Congress, first, to insure that NHTSA has the resources and the authority it needs to protect the public; second, to use its oversight power to insure that the agency is fulfilling its mandate; and third, to allow the agency to set safety regulations without being derailed because industry voices objections. Against this background, we offer the following observations and recommendations.

BRIDGESTONE/FIRESTONE RECALL

1. CU, like motorists across the country, was chagrined to learn that since 1992 there have been more than 50 lawsuits, and possibly as many as 100 lawsuits, related to the Firestone tires subject to the current recall. Many of those lawsuits were settled with protective orders in place, with the effect that critical safety information has been kept from the public. The Senate has had before it S. 957, Senator Kohl's bill, which requires courts to consider the impact on public health and safety before granting such protective orders. CU believes that when a lawsuit is settled, information affecting public safety should never be allowed to be sealed and thereby kept from the public. If NHTSA doesn't now have the power to subpoena information affecting public safety within the confines of these protective orders, Congress should correct that shortcoming in their authority. The ever-increasing extent of the Firestone recall and allegations of previous protective orders shine a bright light on the dangers of these orders to the public's health and safety. One cannot help believing that if this information had been open to NHTSA and the press, many of the tragic deaths and injuries from these tires would have been avoided.

2. Car and tire manufacturers are required to report to NHTSA within a few days of when they discover an automotive safety problem. But the law may be unclear for safety recalls that involve vehicles outside the United States. If there is ambi-

guity in the way the statute can be read, that ambiguity should be clarified by Congress. American consumers were understandably angered upon learning that the same vehicles they were driving, and similar tires to those they were driving on, were previously—and quietly—subject to safety recalls in other countries. We believe manufacturers must be required to share such recall information with NHTSA. Congress should either make changes to the statute or direct NHTSA to amend its regulations to insure that recalls in foreign countries are brought to NHTSA's attention.

3. Congress should take this opportunity to insure there are adequate deterrents to nonreporting of safety information by passing the Administration's legislation calling for heavier fines for failure to report. We urge the Committee to evaluate what level of fine would serve as a realistic deterrent to companies that manufacture products falling under NHTSA's jurisdiction and fall to report safety defects—recognizing that many of them are multi-billion-dollar corporations. CU believes NHTSA's legislation filed last year to increase fines for failure to report a safety defect, raising the penalty from $1,000 to $5,000 for each violation, and raising the maximum penalty from $800,000 to $1 million, is a step in the right direction. We are concerned, however, that these levels are still too low to be effective as a deterrent to non-reporting of defects.

4. There are valuable lessons to be learned from the Firestone recall, and now is the time to put those lessons to use in preventing future problems. We urge Congress to direct NHTSA to establish a far more proactive and coordinated outreach program to acquire available injury information.

a. NHTSA should reach out to repair shops to learn about problems with motor vehicles and automotive products.

b. NHTSA should better track information that comes in through its Auto Safety Hotline.

c. NHTSA's staff should vigorously track private lawsuits to determine whether there is a disproportionate number of suits filed on certain products.

d. NHTSA should improve its data collecting capabilities related to dangerous or defective products; State Farm Insurance reported that it had informed NHTSA that it had received 21 damage reports on Firestone tires. Yet, NHTSA has said in media reports that it has no record of receiving that information. NHTSA needs gather the kind of data State Farm provided in a far more systematic fashion.

e. NHTSA should upgrade the requirements of its durability testing of tires.

NHTSA PROPOSAL ON ROLLOVER INFORMATION

CU notes that the vast majority of the Firestone tire failures have occurred on the Ford Explorer, a sport utility vehicle, and that many crashes reportedly involve the vehicle rolling over after tire failure. While members of this Committee may be aware that sport utility vehicles tend to roll over at a much higher rate than passenger cars, the motoring public does not sufficiently understand the full impact of this problem. Since 1973, CU has been conducting emergency avoidance maneuver testing of all vehicles, and, since 1988, we have been running stability tests for all SUVs and other light trucks we evaluate. Both involve dynamic testing; i.e., driving a vehicle through emergency maneuvers to evaluate its performance.

In 1988, CU petitioned NHTSA to use a dynamic or driving test to set a safety standard for vehicle stability. NHTSA granted CU's petition, but gave up in 1994, stating that the resulting tests would impose significant costs to SUV design. In 1996, CU once again petitioned NHTSA, this time asking the agency to (1) develop a dynamic test to evaluate the emergency handling of SUVs, (2) require that all SUVs be put through that test, and (3) make the test results available to consumers.

NHTSA granted our petition in 1997 and thereby raised expectations that it would develop a dynamic test. CU's comments to NHTSA's proposal, submitted just two weeks ago, notes that after conducting a series of dynamic tests on just 12 vehicles, NHTSA backed away from dynamic testing, instead recommending the use of a static measure known as SSF, as the basis on which to rate vehicles. In our comments, CU said:

> While we believe any information that helps educate consumers about rollover has merit, after a thorough analysis of NHTSA's proposal, we cannot, unfortunately, endorse NHTSA's decision to use only the Static Stability Factor (SSF) to measure vehicle rollover propensity

And continued:

> CU believes that the value of SSF to consumers is preferable to consumers having no information at all. At the very least, it clarifies the fun-

damental differences among categories of vehicles. But it is not a satisfactory regulatory response to an important issue of auto safety. It is too crude a measure to reliably distinguish among models within the same class of vehicles.

We urged NHTSA to continue trying to develop a dynamic test. We have submitted a full copy of our comments to NHTSA to the Committee staff and ask that it be included in the record.

We always have concerns about Congress preventing NHTSA from taking action that the agency deems necessary to promote highway safety. Nevertheless, when Senator Shelby introduced his amendment in the Transportation Appropriations bill to delay NHTSA's action until the National Academy of Sciences (NAS) studied whether SSF is the best stability measure, with Senator Hollings joining him, we were pleased that the amendment also directed the NAS to study the benefits of dynamic testing and to include consumer representatives in the NAS study.

In summary, CU believes we are all at a crossroads, and we need a change of direction. We feel pleased that NHTSA finally has an administrator. Dr. Bailey brings fresh leadership and an impressive set of credentials to put the spirit of service to the consumer back in the agency. We are also pleased that the Committee, and in particular the chairman, has expressed a sincere interest in setting the agency back on a proper course. And no matter what you hear about public confidence in government, consumers need and deserve a strong auto safety agency that has the will to act on their behalf. They need stronger standards, more vigorous attention to injury data, and a relentless commitment to recalling defective products. Consumers Union stands ready to work with you to bring about these sorely needed changes.

POSSIBLE PREVENTIVE MEASURES

Senator SHELBY. Ms. Claybrook, I will try to be brief to give other people a chance to question.

How could this have been prevented. What we have in front of us today is loss of life, the loss of property, but lives more than anything and, obvious to me, a concealment of information that should have been brought out to the public, who ultimately are the consumers, and that is all of us and our families. How could that be prevented?

Ms. CLAYBROOK. Well, first of all I believe the regulatory agency does need to be more proactive. I think it needs much tougher penalties. I think if it has criminal penalties, the executives of these companies are going to think twice before they allow this to happen again. That is my view. Criminal penalties are a very harsh penalty. They are better not used in most cases, I think, but if they are there to be used I think that they are a real deterrent.

And then finally I think that the American Bar Association and the courts of this country ought to prohibit gag orders, because the trial lawyers are put in a terribly awkward position. They are trying to service their client. An offer for settlement is made. The client is ill, desperate, harmed, and they want a settlement, and so there has to be an acceptance of that by the trial lawyer in most cases when it is offered, so the public is not served by that, and I believe it ought to be.

PATTERN OF INJURY DATA NOT RECOGNIZED

Mr. PITTLE. Prior to coming to Consumers Union I was a commissioner at the Consumer Products Safety Commission for 9 years and we, when we set the agency up in 1973, did our best to inspire our staff to take an aggressive search for injury data. You do not wait for it to trickle in and come in the mailbox or over the transom.

I think that is what has been happening to NHTSA over the last few years. I have observed an agency that has lost its will and lost its way. It needs strong leadership at the top to demand that they go out and look for this information, go to auto repair shops, go to tire repair shops. Insurance agencies use the information that the trial lawyers have available. You have to go looking for it. If you wait for it to come you will wait until you find 88 deaths and 1,400 incidents. This should have been picked up a long time ago if the agency was more aggressive.

Senator SHELBY. But the real dynamic here was brought out by this young analyst with State Farm Insurance who was keeping tabs of all this information, was it not?

Ms. CLAYBROOK. He was not keeping tabs. He happened upon it. He happened upon it, and as he processed his paper every day he saw another one, and then another one, and he realized that, but he not only contacted the agency by sending an e-mail with this, he called them up, and he did it—in 1978 he sent them 21 cases—I am sorry, in 1998 he sent them 21 cases. In 1999 he sent them 30 cases, so now they have 51 cases as of 1999 in the agency, sent from the largest insurance company in America for autos.

Senator SHELBY. Mr. Pittle, what did NHTSA do with this information that this gentleman sent them?

Mr. PITTLE. I only know what I read in the press. They say they never got it.

Ms. CLAYBROOK. They got it. They just did not analyze it.

Mr. PITTLE. Whatever they did, nothing got out.

Senator SHELBY. They did not act on it, anyway.

Mr. PITTLE. They did not act on it, and that is what—I am going to go back to the point, you are in the role, and you have the position to speak to the head of the agency to say, we want this agency to be sitting here with the consumer talking about safety problems. I am sorry that she is not here at the table with us, because that is where I would see a disinterested auto safety agency, here with the consumers.

Senator SHELBY. Proactive means they will protect the lives of Americans, does it not?

Mr. PITTLE. Yes. That is the best chance we have.

Senator SHELBY. Senator Lautenberg.

Senator LAUTENBERG. Thanks, Mr. Chairman.

Ms. Claybrook, you in your little demonstration here showed that tire size has little to do with separation, at least in the example that you have presented.

IS RECALL BROAD ENOUGH?

Why would NHTSA not, or why would the company not want to participate as long as they are doing it actively in a recall to call in the larger tires, or whatever size it is that is off the recall, the present recall list, and why would not, should not NHTSA—I do not know whether we are going to hear about that a little bit later—insist that that take place?

Ms. CLAYBROOK. Well, first of all NHTSA is doing a further investigation of all the data. They first asked for information from the companies in May 2000, and they are only just getting the in-

formation in. It has now been 3½ months, so they have to look at the data.

They also have due process requirements. They have to analyze it. They have to make an initial determination of a defect. They have to have a public hearing. The company has to be able to respond and then make a final determination of the defects, so they have a due process burden that they have to carry, and that is appropriate. I agree with that.

So what the agency did last week I applaud. They asked Firestone to recall another 1.4 million tires beyond the 6.5 million. Firestone refused, and so the agency put out a consumer advisory.

Now, this is the first consumer advisory I know of issued by the agency in 15 or 20 years, and consumer advisories are a very effective way of both alerting the public as well as getting more information, and so I applaud them for doing that.

The reason the company did not do a larger recall, you will have to ask Ford and Firestone. My understanding is that Ford took the Firestone claims data, the injury and property damage data, and analyzed it and defined the recall that is now underway, the 6.5 million recall, by the correlation of the injuries and claims to particular tire sizes, but that claims data was as of the May 1. A lot of information has come in since, but also, importantly, it did not include warranty and adjustment data.

Adjustments are when somebody complains, they bring in a bad tire and there is an adjustment made at the dealership. You get half-price off, or whatever it is, and I believe that looking at other data is important to coming to a conclusion, but to me the basic issue is that it is a design defect, and when it is a design defect it covers all the tires.

Senator LAUTENBERG. Mr. Pittle, do other vehicle owners with nonrecalled Firestone tires, have you seen any evidence that there may be some concerns about other brands, or other models besides the ones——

Mr. PITTLE. I have not seen it expressed either through injury data or through our testing, which of course the brand, that would not show up.

DYNAMIC ROLLOVER TEST NEEDED

I have seen a continued concern about being able to evaluate the roll-over propensity of vehicles sitting in the showroom. I want to go back to that, because this is really the combination of two unfortunate situations coming together. We have a vehicle that has a high center of gravity that is linked up with a tire that has a tendency to blow out, and when a tire with a high center of gravity blows out it is going to have a greater tendency to roll over and cause serious injury or death.

And what consumers really want to know is, how do you separate—they know that—I mean, I can tell you that whether you are testing refrigerators, automobiles, or televisions, they all can look alike, very similar, but they act differently, and they each have different characteristics, and the ones that are more prone to roll over, have less competent handling characteristics, you cannot tell by looking at it. You have to test it dynamically to see how it will perform.

It is much akin to trying to decide how something will taste by reading the ingredient list. You really cannot do that. You have got to put it to the test, and that is what NHTSA has to get back on track to do, get back to dynamic testing development.

Senator LAUTENBERG. I wonder whether we are at a point in time when after seeing this disagreement between Ford and Firestone about whether or not—pointing fingers at one another, whether or not there should be a receipt, some kind of an alert or an alarm that goes out pointing out what the risk is with tire inflation.

PUBLIC INFORMATION ABOUT TIRE SAFETY

I can bet you anything that even this day, with all the publicity we have seen, including Mr. Nasser's appearances on television, plenty of people do not just know what to do, do not know about the problem that their families may be facing. How do we get that information out there in a sensible way now and prospectively? Should there be warning labels just like you might see on cigarettes, or the right to know about chemical factories in the neighborhood? The right to know ought to be an integral part of what it is that these products represent by way of a threat to safety.

Ms. CLAYBROOK. Well, I would certainly suggest anyone who has these tires drive more slowly. One of the issues here is that the speed limit has gone up from 55 miles an hour to 65 and 70 miles an hour, so people are going faster. They buy these vehicles to go on vacations and trips often, so they are driving 4, 5, 6 hours at a time. The tires get very hot, and when the tires get hot, that is when the tread separation is likely to occur.

And this heat build-up, that is the reason this issue of the climate was first mentioned, because in colder weather the heat is dissipated faster. In hot weather it is not dissipated faster. In addition, these are truck tires. Truck tires were really designed for pick-up trucks, and these are tires that are now on vehicles that people use in the same way they use cars.

I would say Ford Motor Company does put the specifications for these tires on paper, and require certain specifications for the tires and the tire manufacturer then manufactures them, so there is not a disconnect in the sense of not knowing what this tire is when it is bought by the vehicle manufacturer, and the vehicle manufacturer tests them and so do the tire manufacturers, and the vehicle manufacturer tests them on the vehicle.

That is the reason that they decided to lower it to 26 psi, because they tested it with a higher psi and the vehicle rolled over, so then they decided to lower the psi, the pounds per square inch inflation of the tires.

Senator LAUTENBERG. Thank you, Mr. Chairman.

Senator SHELBY. Senator Specter.

Senator SPECTER. Thank you, Mr. Chairman.

FOREIGN COUNTRIES' RESPONSE TO DEFECTS AND RECALL

Ms. Claybrook, you testified that the Venezuelan authorities are considering prosecution for involuntary manslaughter. That, in my judgment, would be grossly insufficient.

Involuntary manslaughter is an offense where there is gross negligence. That does not comprehend conduct where there is knowledge that there is a defect which could cause the death of another. Where that knowledge is present in advance, that is equated in common law with malice, which is sufficient to constitute a charge of second degree murder.

I know you are not responsible for what Venezuela does, but I think that point ought to be emphasized, that this is not a matter of negligence or gross negligence, which would give rise to a charge of involuntary manslaughter.

Ms. CLAYBROOK. Senator Specter, I would just say there is a question, and of course with translation it is somewhat difficult for us to be sure of exactly what the authority is under Venezuelan law, so my feeling is, although I do not know this for a fact, is that that is probably what they thought they had the authority to do.

Senator SPECTER. Ms. Claybrook, you testified that criminal penalties ought not to be ordinarily used in matters of defective products. How about this case, where key Ford officials and key Firestone officials knew about the defect, evident by having products recalled from Saudi Arabia? Is this the kind of a matter, in your judgment, that a criminal penalty would be appropriate?

Ms. CLAYBROOK. I think that it is. I think there should be a full investigation, of course, and complete documentation, which there certainly is not at this time, but I certainly think that it should be the subject of consideration.

Senator SPECTER. Mr. Pittle, I note you nodding in the affirmative.

Mr. PITTLE. Well, I am just thinking——

Senator SPECTER. Excuse me, I have not come to my question, but I do not want to take an affirmative nod into the record without giving you a chance to answer.

EFFECTIVE DETERRANTS

You testified that a fine on a failure to report is not an effective deterrent. I think that is pretty obvious. Do you think a second degree murder prosecution against the officials at Ford and Firestone who were shown to have known that these defects were present and failed to act to recall these defective products would be an effective deterrent?

Mr. PITTLE. I think that would be an effective deterrent, yes.

Senator SPECTER. I note an affirmative nod on what Ms. Claybrook was testifying to, when I asked her the question as to whether she thought this was an appropriate case for criminal prosecution. Do you agree with her?

Mr. PITTLE. I was nodding to my own memory of my own experience in this area, and I was not nodding specifically to her response.

Senator SPECTER. Good. We will give you a chance to answer the question verbally and vocally.

Mr. PITTLE. When I was at the Product Safety Commission we found on a number of occasions in which we had the authority to impose criminal penalties, when there was evidence that a manufacturer knew about and did not recall a serious hazard, we ran into situations where when the rubber meets the road—not a good

analogy in this case—it would find that the U.S. Attorney might say, this is not a very strong, exciting, big enough case, I think I am not going to bring it, or you would find——

Senator SPECTER. Well, never mind those cases. How about this case?

Mr. PITTLE. I think this case is clearly big enough, serious enough, broad enough and, depending upon what the investigation brings out about the facts leading up to where we are now, that it would go forward.

Senator SPECTER. There is a very heated debate in the Congress about the issue of punitive damages, and my experience both as a civil defense lawyer and as a representing plaintiff's, and before that as a district attorney in Philadelphia, where you have the criminal sanctions, but my experience has shown that punitive damages do not amount to much because the awards, which look gigantic in the newspapers, do not hold up.

I know of a case where Ford Motor Company had a defective brake mechanism which they knew existed and did not recall, and a 3-year-old child was killed when a truck backed over the child and the verdict was $153 million, since reduced to $69 million, and on appeal that—it doubtless will be reduced further, and it takes the most extraordinary kind of litigation effort to carry one of those cases forward, and there is no doubt that when you talk about punitive damages it is cost effective for the company not to fix the product.

CRIMINAL PROSECUTION

You have the famous Pinto case, where the documents which were finally discovered and disclosed, that here again Ford calculated that it was cheaper to pay the damages than it was to repair the vehicle.

That sort of a situation, it seems to me, just cries out for criminal prosecution with cases established of knowing what has happened.

Ms. CLAYBROOK. Senator Specter, if I could comment on the Pinto case, there was actually a criminal prosecution in that case by a local prosecutor in Indiana who lost the case, and I think for lack of resources, utter lack of resources, because that was the only way a criminal prosecution could be brought in the case, because there was no Federal authority to bring a criminal prosection for refusal and failure to recall.

Senator SPECTER. Ms. Claybrook, do you think that, in your list of recommendations for legislative changes, that there ought to be Federal legislation establishing criminal liability, homicide, or murder in the second degree, for reckless disregard of the safety of others on products which move in interstate commerce?

Ms. CLAYBROOK. I do.

Senator SPECTER. Thank you very much. Thank you, Mr. Chairman.

Senator SHELBY. Senator Byrd.

Senator BYRD. Thank you, Mr. Chairman. Ms. Claybrook, I have known you for many years. Sometimes we have been in adversarial positions, but I compliment you on your statement today and on your recommendations. You have been very helpful to me when we

were acting on the zero-tolerance, under-age drinking and driving amendment, and I want to publicly thank you for that.

You were the NHTSA Administrator during the largest tire recall, the Firestone 500 recall. You stated that in both cases Firestone has withheld information. Do you believe this is a problem that is peculiar to Firestone, or is it shared by other tire manufacturers?

Ms. CLAYBROOK. I do not think it is peculiar to Firestone. I certainly think that it occurs with some frequency at the Department of Transportation as to other manufacturers. There has been clearly withholding of information by companies, and I think the reasons why are that they have not had sufficient penalties. They have not had civil penalties. They have not had criminal penalties. They have not had penalties of withholding documents per day as opposed to just for each document.

If you look at a comparison of a case developed by the Department of Transportation, NHTSA on a particular recall, and then you look at the file of a really first class trial attorney who has gone after documents in a similar case, you will see that the trial attorney has many more documents and understanding of the case and the internal decisionmaking process of the company than does the Department of Transportation, and the reason why is because the court can sanction the company and the agency cannot, and often does not.

Senator BYRD. What about the auto manufacturers?

Ms. CLAYBROOK. I was including them in that statement.

SAFETY OF SUVS

Senator BYRD. Do you believe that sports utility vehicles can be reengineered to be safer for the occupants, or are they inherently unsafe because of the gravity problem?

Ms. CLAYBROOK. I think they can be reengineered, and I understand that the Ford Explorer is being reengineered for the year 2002. The chairman of Ford has said that—he acknowledged about 3 or 4 months ago that these vehicles did have to be redesigned, and I compliment him and the company on being up front about that.

These are cash cows for these companies. They bring in huge profits, and generally the auto companies' view is that what sold yesterday will sell tomorrow until we know it does not, and then we will change it, and I think much of their resistance to not changing the vehicle design is because they have been so popular, but I think this case in many ways has informed the American public that they are susceptible to roll-over and they need to be redesigned, and I think it is going to push every company to do that.

And if there is any solace for the families of the people who have died and been injured, it is that I think it is going to spur some major change, but I do not think it ought to just be within the companies. I think the Department of Transportation ought to issue a roll-over standard that is a dynamic testing standard that makes it clear that these vehicles are not going to be these unknown killers unnecessarily.

Senator BYRD. Ms. Claybrook, your testimony is very forthright. You are very knowledgeable, and I want to compliment you and thank you for your statement, and also thank you, Mr. Pittle.

Thank you, Mr. Chairman.

Senator SHELBY. Senator Domenici.

Senator DOMENICI. Mr. Chairman, I very much would like to hear from some of the company witnesses, and I want to thank both of the witnesses.

PUBLIC SAFETY NEEDS TO BE STRENGTHENED

From my standpoint it was not only the companies you have told us here today that need to do some fixing up, but our own agency obviously is very weak. Either that, or we do not understand the situation, but it would seem to me that safety—trying to protect the public in terms of automobiles and tires—from what you have told us, seems not to be a very important part of the life of this agency in charge of safety.

Now, maybe the companies do a great job. Perhaps they do, I think considering how many vehicles are made every year and how many are bought and how many are on the roads. I am not suggesting we take over the companies one iota, but we must have—this has to be a case of indicating we have got to strengthen the agency, and we have got to focus in on this particular one and see what we can do to get it repaired and to move on from there.

So I thank both of you. It has been a very enlightening morning.

Senator SHELBY. Senator Mikulski.

Senator MIKULSKI. Thank you, Mr. Chairman. I know the time is moving along. I really am going to ask Ms. Claybrook one question, acknowledging the wonderful role that Mr. Pittle has played in both his role at the Consumer Products Safety Commission, which I am an appropriator of, as well as now.

Ms. Claybrook, we really had an unfortunate historic situation here. In 1970 Ralph Nader wrote his book, Unsafe at Any Speed. And 30 years later, people driving these vehicles and on these tires continue to be unsafe at any speed, and there have been 15 accidents in Maryland, no deaths, but every accident is a tragedy or a death waiting to happen.

NEED FOR EFFECTIVE QUALITY INSPECTION AND CERTIFICATION

Let me go to my question. First, thank you, because of telling me about the early warning. It is an issue I want to take up with Dr. Bailey, but here is the question. Right now in my home State of Maryland, to protect the food supply of the American people we have inspectors at the chicken factory right now who are getting ready the wonderful delicacies that come out of Maryland to feed the Nation. The fact is that we have inspectors in the factory, on the line, worried about salmonella and all the other kinds of things, and they are there to protect the American people.

My question, then, goes to this. What are the inspectors at an automobile car manufacturing plant? Do we have mandatory inspection? Do we have mandatory reporting that comes out of that? Do we have this? If we can bring inspectors to look at our chicken parts, should we bring in inspectors to look at our auto parts?

Ms. CLAYBROOK. The way that the National Motor Vehicle Safety Act is constructed, the companies self-certify they are in compliance with the standards. If the agency has reason to believe, or is concerned, it can send inspectors. It has authority to send inspectors, but there are no routine, regular inspectors out there on the line, but what the agency does is, it takes the product and it randomly buys them from dealers, so the companies do not know where they are buying it, and they test them to assure that they are, in fact, in compliance with the standards, and I will have to say that most of the time they are.

Part of the problem in this case is the standard is so old and insufficient that it passed the standard. This tire passed the standard in 1997, and so the standards are out of date. They need to be updated.

I would not necessarily change the system. The one recommendation the Department has made and I endorse is that there be a statutory requirement that before they can self-certify they have to have tested, and they have to have test results that show that they have complied, and the Department can then ask for those tests any time they want.

Senator MIKULSKI. So you would not put in inspectors in the factories?

Ms. CLAYBROOK. I do not think so.

Senator MIKULSKI. Again, would you have mandatory submission of quality control reports and then spot inspection other than retail sampling?

Ms. CLAYBROOK. I think the Department would be completely overwhelmed. As I said, there are only about 20 people in the agency who work on defects, I think or engineers or investigators, and the agency would have to be vastly enlarged in order to have that capacity. I think the better way to do it is to have the statutory requirement that they must do tests to certify their compliance, so any time the agency——

Senator MIKULSKI. And severe penalties if they submit deceptive or faulty——

Ms. CLAYBROOK. And any time the agency wants they can ask for these tests and look at these tests, and if there is falsification of the tests, then they are in real trouble, and I do not think there would be in most cases anyway.

Senator MIKULSKI. Thank you very much.

Thank you, Mr. Chairman.

Senator BYRD. And with new and updated standards.

Ms. CLAYBROOK. A new and updated standard for tire safety, right.

Senator SHELBY. Senator Kohl.

Senator KOHL. Thank you, Mr. Chairman. I have a statement and a question for both of you. In the wake of these reports about faulty tires and the accidents that they have most certainly caused, there has been a great deal of blame-laying about why this information took so long to get out into the public domain.

EFFECT OF GAG ORDERS

One thing I believe is abundantly clear. Many of these cases were settled in and out of court with confidentiality agreements,

which agreements kept information, crucial information about millions of defective tires, behind closed doors and away from the public.

The question is, first, is there any doubt in your minds that the secrecy orders led to more injuries, accidents, and deaths, and second, I have a bill with bipartisan support that would make the secrecy orders much tougher to get when health and safety issues are at stake.

In the wake of these tragedies, do you believe that this bill should be unanimously supported and voted upon?

Ms. CLAYBROOK. Well, first of all I do believe that gag orders kept this information secret inappropriately, and resulted in the death and injury of lots of people. I think these orders are unethical. I think among other things the American Bar Association ought to declare them as unethical.

As you know, we supported your legislation. My only concern is that I do not favor the Federal Government telling State courts what to do, and I am very concerned about that.

The other issue is that every time your bill starts to come up they want to put a whole bunch of other things that undercut the tort system on top of your bill, so there is some complexity there, as you know, but certainly I do not believe that these protective orders ought to be allowed.

Senator KOHL. Mr. Pittle.

Mr. PITTLE. That is Consumers Union's view as well. We think that these gag orders have clearly led to the withholding of information that if it had been made public this hearing would have occurred months ago, maybe years ago, and the injuries and deaths that have occurred during the interim would not have occurred, and Consumers Union does support the abolition of gag orders and agreements where public safety information is sealed away and left to be out of view while the product goes on and injures or kills more people.

Senator KOHL. Well, we are committed to getting this legislation passed if not this year, next, and I trust we will have your full support and cooperation in this effort, and I thank you so much.

Senator SHELBY. I want to thank both of you for appearing here and giving your testimony, and I appreciate having been able to work with both of you on it.

On our second panel, we will have Mr. Ono, the chief executive officer of Bridgestone/Firestone, and he will be making the opening statement and then will be replaced by Gary Crigger, the executive vice president of Bridgestone/Firestone.

We also have Helen Petrauskus, vice president, environmental and safety engineering, who will be testifying for Ford Motor Company, and Dr. Sue Bailey, the Administrator of NHTSA will testify on behalf of the Federal Government.

We welcome all of you to the hearing. Mr. Ono, if you will take the mike closer to you, people will be able to hear you. If you will, sir. It is not too sensitive. Mr. Ono, your written statement will be made a part of the record, and you can proceed as you wish. Welcome.

STATEMENT OF MASATOSHI ONO, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, BRIDGESTONE/FIRESTONE, INC.

ACCOMPANIED BY:

GARY CRIGGER, EXECUTIVE VICE PRESIDENT, BUSINESS AND PLANNING, BRIDGESTONE/FIRESTONE, INC.

BOB WYANT, VICE PRESIDENT, QUALITY ASSURANCE, BRIDGESTONE/FIRESTONE, INC.

Mr. ONO. Chairman Shelby and members of the subcommittee, thank you for providing me with this opportunity to appear before you here today. I have my speech so that I may deliver in English. However, I must use a translator, and two of my senior executives will respond to your questions. I have never made a public appearance like this before, so I am more than a little bit nervous.

As the chief executive officer, I come before you to apologize to you and especially the American people, especially the families who have lost loved ones in these terrible roll-over accidents. Also, I come to accept full and personal responsibility on behalf of Bridgestone/Firestone for the events that led to this hearing.

Whenever people are hurt or fatally injured in automobile accidents it is tragic. Whenever people are injured while riding on Firestone tires, it is cause for great concern among Bridgestone/Firestone management and our 35,000 American employees.

On August 8 we met with the National Highway Traffic Safety Administration. We reviewed what we knew at that time about the performance of the tires which are associated with the tread separation and accidents primarily on the Ford Explorer vehicles. On the following day, August 9, Bridgestone/Firestone announced a voluntary safety recall of 6.5 million tires. Since that time, our highest priorities have been to complete the recall as quickly as possible and to determine the root cause of the tire failures.

At this time, we have replaced nearly 2 million of the tires. We have been maximizing worldwide production of replacements for tires that have been recalled. To speed up the process we are using our competitors' tires and airlifting additional replacement tires, and these shipments will continue as long as necessary.

We have a team working around the clock, using all our available resources to try and determine the root causes for the tire problem. We are reviewing every aspect of our manufacturing and quality control processes. This includes microscopic examination of many recalled tires.

In addition, we are working with Ford Motor Company and their experts to thoroughly examine every possible cause. Unfortunately, I am not able to give you a conclusive cause at this time. However, you have my word that we will continue until we find the cause.

While we search for the root cause we are also undertaking the following actions. First, we will appoint an outside, independent investigator to assist in tire analysis and determine the root cause of the tire problem we have experienced. We are taking this action to help assure you and the public that the Firestone tires are reliable now and in the future.

Second, we will fully cooperate with this committee about the safety as well as problems that have occurred with our tires. We will release data and information in order to assure consumer safety with our products.

Third, we are accelerating the roll-out of a Nation-wide consumer education program. The program will be run through more than 7,000 company stores and Firestone dealers. It will provide consumers with information on proper tire maintenance through the use of in-store videos, showroom displays, brochures, windshield tags, and tire pressure gauges.

Fourth, we pledge to continue working with the NHTSA towards developing early understanding and complete reporting of accidents, and developing approaches that make it easier for drivers to determine tire pressure.

With your permission, I would now like to ask two of my senior executives to join me so that we can more efficiently respond to your questions. Mr. Gary Crigger is executive vice president, business planning, and Mr. Bob Wyant, vice president of quality assurance.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF MASATOSHI ONO

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Since that time, our highest priorities have been to complete the recall as quickly as possible and to determine the root cause of the tire failures.

At this time we have replaced nearly two million of the recalled tires. We have maximized worldwide production of replacements for tires that have been recalled. To speed up the process, we are using our competitors' tires and air lifting additional replacement tires and these shipments will continue as long as necessary.

We have a team working around the clock using all our available resources to try and determine the root causes for the tire problem. We are reviewing every aspect of our manufacturing and quality control processes. This includes microscopic examination of many recalled tires. In addition, we are working with Ford Motor Company and experts to thoroughly examine every possible cause.

Unfortunately, I am not able to give you a conclusive cause at this time. However, you have my word that we will continue until we find the cause.

While we search for the root cause, we are also undertaking the following actions:

First, we will appoint an outside independent investigator to assist in tire analysis and determine the root cause of the tire problem we have experienced. We are taking this action to help assure you and the public that Firestone tires are reliable now and in the future.

Second, we will fully cooperate with this committee about the safety as well as problems that have occurred with our tires. We will release data and information in order to assure consumer safety with our products.

Third, we are accelerating the rollout of a nationwide consumer education program. The program will be run through more than 7,000 company stores and Firestone dealers. It will provide consumers with information on proper tire maintenance through the use of in-store videos, showroom displays, brochures, windshield tags and tire pressure gauges.

Fourth, we pledge to continue working with NHTSA toward developing early understandings and complete reporting of accidents and developing approaches that make it easier for drivers to determine tire pressure.

In closing, this year Firestone is observing its 100th anniversary. It is a proud history. Henry Ford used Firestone tires on the original model-T. For 100 years, mil-

lions of families have placed their trust and faith in the good people of Firestone. We feel a heavy responsibility to make certain that we are worthy still of your continued trust and confidence.

With your permission, I would now like to ask two of my senior executives to join me so that we can more efficiently respond to your questions. Mr. Gary Crigger is executive vice president, business planning and Mr. Bob Wyant is vice president, quality assurance.

Thank you.

STATEMENT OF HELEN PETRAUSKU, VICE PRESIDENT, ENVIRONMENTAL AND SAFETY ENGINEERING, FORD MOTOR COMPANY

Senator SHELBY. Ms. Petrauskus, you are appearing on behalf of Ford, right?

Ms. PETRAUSKUS. Yes, I am.

Senator SHELBY. You may proceed.

Ms. PETRAUSKUS. Good morning, Mr. Chairman, members of the committee. Since we at Ford first found out about the problem of tread separation we have been guided by three principles. First, we will do whatever we can to guarantee our customer safety. We are committed not only to their physical safety but to their feelings of security when they are driving their vehicles. We, too, are deeply troubled by the fact that there are defective tires on some of our vehicles.

Second, we are working hard to replace bad tires with good tires, and that includes making sure we understand the scope of the problem and finding the specific cause of the problem, and then finally we will continue to be open about any data, statistics, information that we have, and we will share it with you as soon as we know it.

Mr. Chairman, you chastised me not to come in here and tell you that this is a tire issue, and I am not going to do that, but I do want to talk about the safety of the Explorer, and the first chart I have shows the Explorer safety record, and it is a safety record that is based on the best and the only Federal safety data base for serious accidents, or in this case fatalities. Literally every fatality that occurs on the Nation's highways is reflected on that data base, and I wish those fatalities could be zero, but they are not.

What I want to show you is for the 10-year history of the Explorer since it was first introduced it is safer in all accident types, compared to other sport utility vehicles, by a substantial amount, and what is most important in the issues we have been talking about today, it is safer from a roll-over standpoint by a substantial amount compared to other sport utility vehicles.

Jerry, if I could have the next slide just quickly.

So if we compare based on this best data base that our country has, the safety performance of the Explorer, and we find ourselves looking at it in kind of a cold-blooded way, the number of fatalities that take place per 100 million miles of driving, what we find is there are 1.6 fatalities per 100 million miles driven for the average passenger car, and we find for the average SUV that number is 1.3, and for the Explorer that number is 1.0, and we want to do everything we can to make it lower. It is a very safe vehicle.

Let me just add to that, that of the Explorers we produced we have millions, probably 2½, between 2½ and 3 million Goodyear tires installed on these Explorers over this period of time, and they have the same specification as the Firestone tire, including the

same specification for recommended tire pressure, and they have not experienced problems and, indeed, Explorers equipped with nonrecalled tires have not exhibited those problems.

Having said all that, the most important thing now is that we strongly support Firestone's decision to recall the 15-inch ATX and the Decatur, Illinois-built Wilderness AT tires. Based on the Firestone data that we have, we believe these are the problem tires, and in our written statement we have submitted a more detailed analysis.

In terms of customer focus, our top priority is to replace faulty tires as fast as possible. As of September 1 over 1½ million tires have been replaced.

We have worked with the entire tire industry, the worldwide tire industry, not just Bridgestone/Firestone but all the other tire producers around the world, to increase their production of 15-inch tires, and they will do so at the rate of about 250,000 tires a month by the end of this month, and we have suspended production at three of our assembly plants so that those trucks with new tires that were headed for our plants could head for our dealerships and bring tires to our customers faster. In this regard, we have engaged about 3,300 Ford and Lincoln Mercury dealers to participate in this.

Let me turn to the overseas action. When reports of tread separations in Saudi Arabia first came to our attention we asked Firestone to investigate. They concluded that the tire failures were due to external causes such as poor repairs, road hazard damage, and extreme operating conditions. Given the problems our customers were having, we, Ford, decided to replace the tires with a more puncture-resistant tire.

Another market in which we have experienced tire problems is Venezuela. Our ability to understand that situation is complicated by the fact that about three-quarters of the tires that we used in Venezuela were locally produced, as opposed to shipped from the United States. Again, Firestone concluded that the tread separations were caused by poor repairs, road hazard damage, and operating conditions. In May, we, Ford, began replacing all these Firestone tires.

Concern about the safety of all of our customers, including our U.S. customers, drove us to look aggressively for evidence of a defect in the United States at the very same time we were taking actions overseas. As early as April of last year, we were searching all of the available data files available to us, and by that I mean all of our own complaint records, all of our own warranty records as well as the Government records.

We asked Firestone to check all of their records, and we had new tires tested under three separate, very severe test conditions to try to cause the tread separation to happen, and then I think very importantly last fall we kicked off a tire evaluation program in Texas, Nevada, and Arizona.

In all of this we found no defect. Our first evidence of a defect came when NHTSA opened its investigation and required Firestone to assemble and provide data on property damage, personal injury, and lawsuits, and Ford insisted on obtaining that data as well.

When we received that data on July 27, we quickly analyzed it and identified the problem tires that were recalled on August 9.

The chart we have there shows you and summarizes our analysis, and what that analysis shows is, if we look at property damage claims, injury claims on a per-tire basis and adjust it for the volume of tires that are in use, we see very significant differences in the performance of the tires that were recalled as opposed to the ones that were not recalled.

In conclusion, our mission remains to replace bad tires with good tires as quickly as possible. The safety, the trust, the peace of mind of our customers is paramount to Ford Motor Company.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF HELEN PETRAUSKAS

Good morning, Mr. Chairman, members of the Committee. I am Helen Petrauskas, Vice President of Environmental and Safety Engineering. I have been with Ford Motor Company for almost 30 years.

I am deeply troubled by the fact that there are defective tires on some of our vehicles. As you know, Firestone manufactured and warranted these tires. However, because so many of these tires were used as original equipment on Ford products, we have taken extraordinary steps to support this recall and ensure the safety of our customers. Ford Motor Company is absolutely committed to doing the right thing to protect our customers and to maintain their trust.

Throughout this period, we have been guided by three principles. First, we will do whatever we can to guarantee our customers' safety. We are committed not only to their physical safety, but also their feelings of security when driving our vehicles. Second, we are working hard to find and replace bad tires with good tires. That includes making sure that we understand the scope of the problem and finding the cause of the problem. Third, we will continue to be open about any data, statistics or information that we have, and will share anything new as soon as we know it.

ACTIONS WE HAVE TAKEN

Now, let's talk about the actions Ford has taken to support the recall and why we believe these are the right actions.

First, this is a tire issue, not a vehicle issue. We have millions of Goodyear tires on 1995 through 1997 Explorers—the same specification tire operating under the same conditions—and they haven't experienced these problems.

Furthermore, the Explorer is one of the safest SUVs on the road. Proof of this is our exemplary safety record over the last decade. The most recent data from the Department of Transportation show that the Explorer has a lower fatality rate than both the average passenger car and competitive SUV, as shown in Attachment 1. Additionally, Explorer's fatality rate in rollover accidents is 26 percent lower than other compact SUVs (Attachment 2).

Second, we strongly support Firestone's decision to recall 15 inch ATX and Decatur-built Wilderness AT tires. Based on the Firestone data we have, we've determined that these tires are problem tires. We have made a detailed analysis of the Firestone claims data (which is the only comprehensive data covering this matter). We have made our analysis available to our customers, to the public, to Firestone, to the media and to NHTSA. The chart in attachment 3 clearly shows the problem tires. As you can see, they are the Firestone ATX and ATXII tires, and the Decatur, Illinois-built Wilderness AT tires, all in the size P235/75 R15—the 15 inch size.

A more detailed explanation of our analysis of Firestone's claims data is included in our attachments. As you can see in Attachment 4, the P235/75R15 clearly had a significantly higher number of claims than other tire sizes, at 2,030 claims, compared to the next highest tire size, with 137 claims. The claims were broken out by complaint, as shown in attachments 5 and 6. Of the total 2,030 claims, 1,424 claims were related to tread separation.

We looked at the claims rate for the 15 inch ATX and Wilderness tires in the 1996 production year—the only year both products were produced in significant volumes. The ATX claims rate for tread separation was eleven times higher than the Wilderness claims rate (Attachment 7).

To better understand the population of bad Wilderness tires, we looked at the tread separation claims rate by plant and production year, as shown in Attachment

8. The Decatur, Illinois plant clearly showed a different pattern than other Firestone plants. For example, in the 1996 production year, the Decatur plant had a 66.3 claims rate (per million tires) compared with a 6.6 claims rate for other plants.

We looked at the data in even more detail, analyzing claims by time in service at claim date, tire production year, and plant. Again, the P235/75R15 ATX and Wilderness tires produced at the Decatur plant showed a clear defect trend (Attachments 9 through 11). And, we did look at both 15 inch and 16 inch tires for tread separation claims between 1995 and 1999 (Attachment 3). Again, the 15 inch ATX and Wilderness tires manufactured at Decatur showed significantly higher claims rates than other Firestone plants. As you can see from the chart, the claims rate for the Wilderness AT 16 inch tire has been extremely low—0 for Decatur and 2.3 at other plants.

This is how we isolated the bad tires. What we still don't know is why these tires fail. We are working hard on that.

CUSTOMER FOCUS

As I said, our top priority is to replace faulty tires as fast as possible. I'd like to highlight a few of the many things we have done to support Firestone's recall and speed replacement. As of September 1, 2000, about 1.5 million tires have been replaced—about 23 percent of the total population of affected tires. We worked with the tire industry to increase production of 15-inch tires by more than 250,000 tires per month by the end of September. We have suspended production at three assembly plants, adding approximately 70,000 tires to the replacement population. We have engaged 3,100 Ford and Lincoln-Mercury dealers to perform tire replacements.

We've also made a major effort to communicate information about the Firestone recall to our customers. For example, we have opened an additional call center to deal specifically with inquiries on the tire recall. We are using our website to provide detailed information on the recall action. And we are running national and local newspaper and television ads to alert customers to the recall and show them how to tell if their vehicles are affected.

OVERSEAS ACTIONS

I would also like to comment on our actions overseas. When reports of tread separation in Gulf Coast Countries came to our attention, we asked Firestone to investigate. They concluded that the tire failures were due to external causes, such as poor repairs, road hazard damage, and extreme operating conditions. Given the problems our customers were having, we decided to replace the tires with a more puncture resistant tire.

Another market where we have experienced tire problems is Venezuela. The situation in Venezuela is complicated by the fact that about three-quarters of the tires were locally produced. Again, Firestone concluded that the tread separations were caused by poor repairs, road hazard damage, and extreme operating conditions. In May, we began replacing all the Firestone tires on Ford Explorers and certain light trucks in Venezuela.

Concern about the safety of all of our customers, including our U.S. customers, drove us to look aggressively for evidence of a defect in the U.S. at the same time we were taking actions overseas. I share this with you, not to finger point at Firestone, but simply to tell you what we did. As early as April of 1999, we were searching all available data bases—our own and the government's. We asked Firestone to check its records. And we had new tires tested under three separate, severe test conditions to try to cause tread separation to happen. Last Fall, we kicked off a tire inspection test program in the Southwest of the U.S. No defect trend was found.

When NHTSA opened their investigation, and required Firestone to assemble and provide data on property damage, personal injury, and lawsuits, Ford insisted on obtaining the data as well. When we received the data late in July, we quickly analyzed it and identified the problem tires that were recalled August 9.

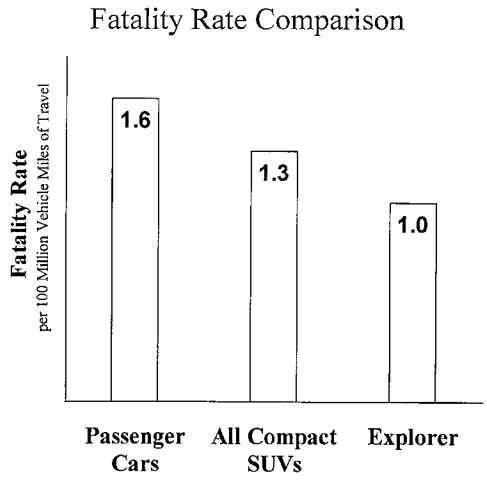
It has been standard practice in the automotive industry that tires are the only part of the vehicle not warranted by the vehicle manufacturer. They are the only part for which vehicle manufacturers do not receive field performance data.

Through all this, we were always open and sought only to find the facts and do the right thing for our customers.

CONCLUSION

Our mission remains to replace bad tires with good tires as quickly as possible. The safety, trust and peace of mind of our consumers are paramount to Ford Motor Company.

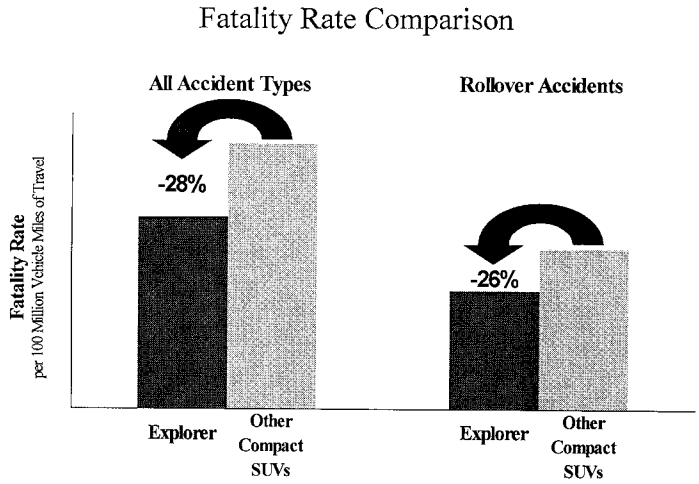
ATTACHMENT 1



Source: Department of Transportation Data

Ford Motor Company

ATTACHMENT 2



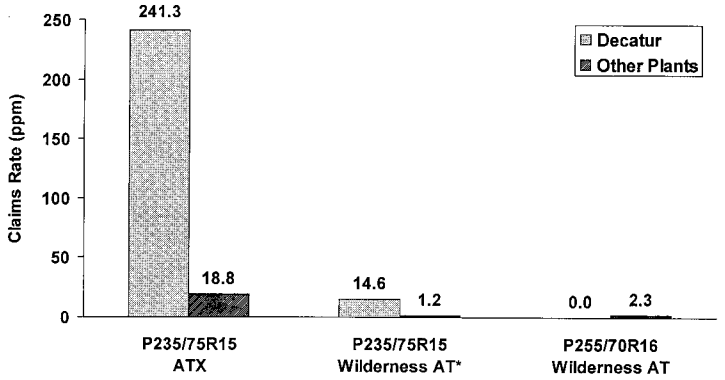
Source: Department of Transportation Data

Ford Motor Company

ATTACHMENT 3

Tread Separation Claims Rate for Firestone 15-inch and 16-inch Tires

Production Years 1995-1999 and Claims Years 1995-1999

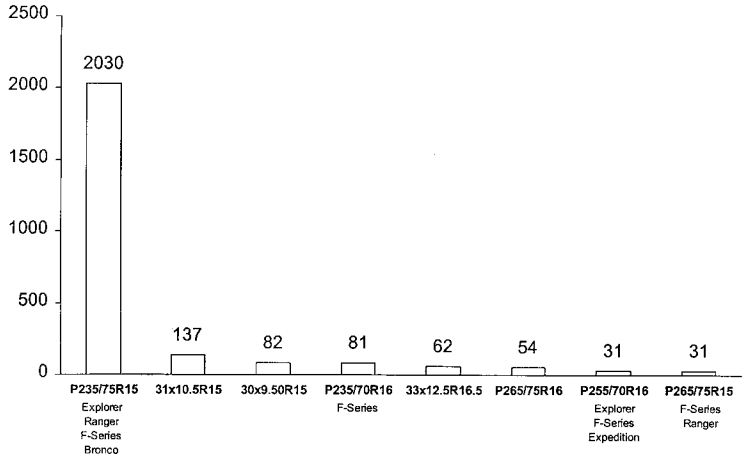


* P235/75R15 Wilderness AT 15-inch production began in 1996

Ford Motor Company

ATTACHMENT 4

Claims for Firestone Tires by Tire Size

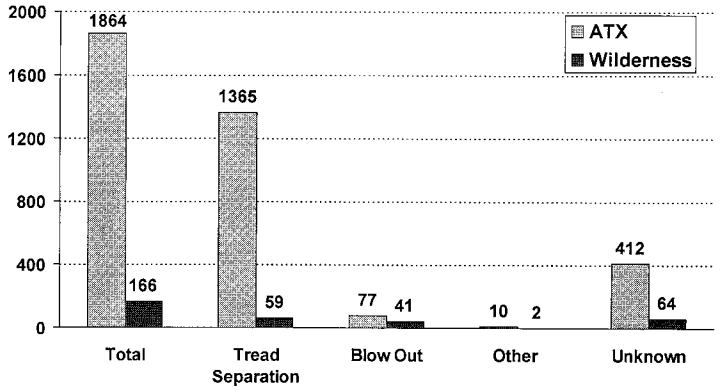


Firestone Property Damage and Injury Claims and Lawsuits Submitted Pursuant to NHTSA Inquiry
Tire Sizes with More Than 30 Claims
Tires with Ford Original Equipment Application Noted

Ford Motor Company

ATTACHMENT 5

Claims for Firestone P235/75R15 ATX and Wilderness Tires by Type of Claim

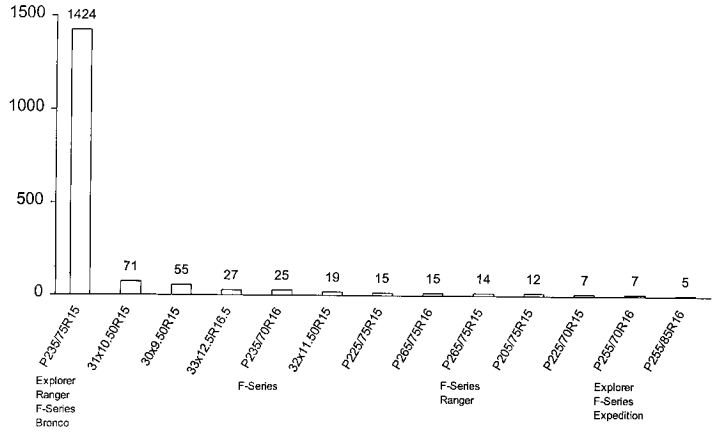


Firestone Claims Data

Ford Motor Company

ATTACHMENT 6

Tread Separation Claims for Firestone Tires by Tire Size

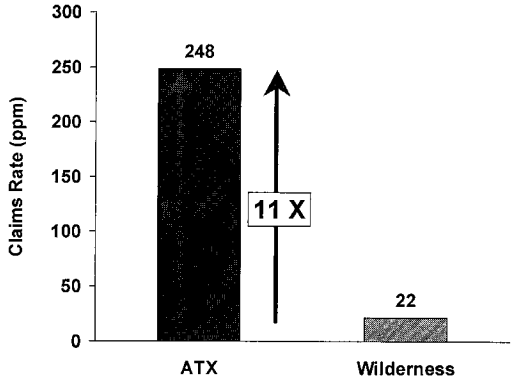


Firestone Claims Data
Tire Sizes with at least 5 Tread Separation Claims
Tires with Ford Original Equipment Application Noted

Ford Motor Company

ATTACHMENT 7

Tread Separation Claims Rate for Firestone P235/75R15
ATX and Wilderness Tires for 1996 Tire Production Year

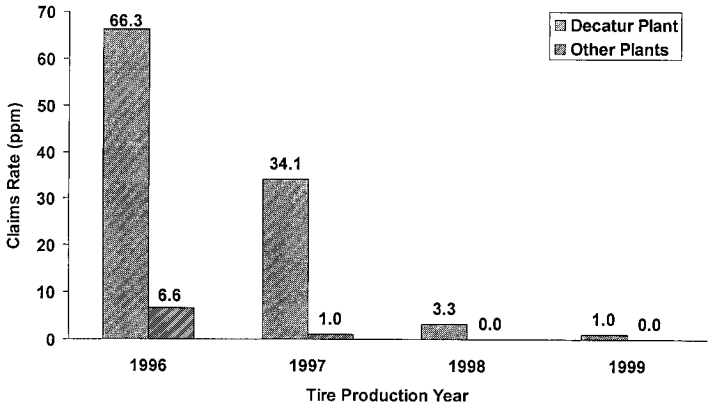


Firestone Claims and Production Data

Ford Motor Company

ATTACHMENT 8

Tread Separation Claims Rate for Firestone P235/75R15
Wilderness Tires by Tire Production Year and Plant

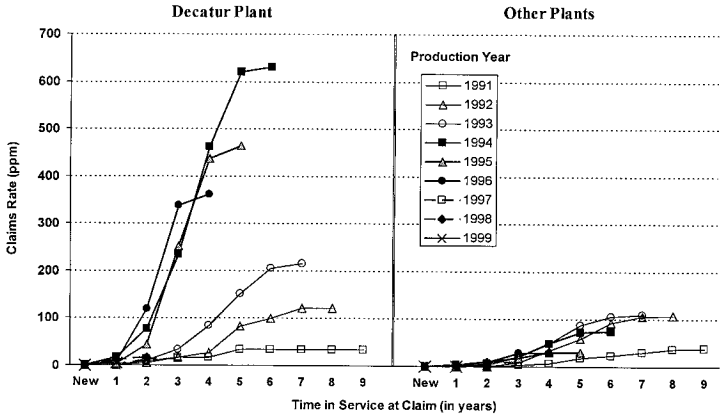


Firestone Claims and Production Data

Ford Motor Company

ATTACHMENT 9

Tread Separation Claims Rate for Firestone P235/75R15 ATX
by Time in Service at Claim, Tire Production Year, and Plant

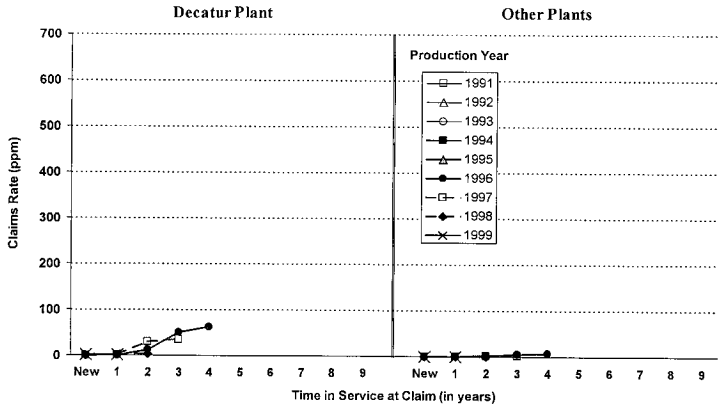


Firestone Claims and Production Data

Ford Motor Company

ATTACHMENT 10

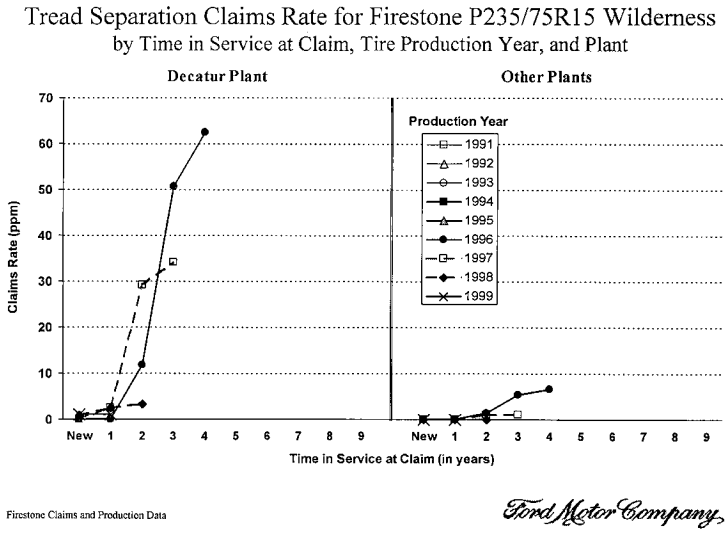
Tread Separation Claims Rate for Firestone P235/75R15 Wilderness
by Time in Service at Claim, Tire Production Year, and Plant



Firestone Claims and Production Data

Ford Motor Company

ATTACHMENT 11



STATEMENT OF HON. SUE BAILEY, M.D., ADMINISTRATOR, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

Senator SHELBY. Dr. Bailey.

Dr. BAILEY. Mr. Chairman, members of the committee, I am pleased to appear before you this morning——

Senator SHELBY. Would you bring the mike towards you a little more?

Dr. BAILEY [continuing]. To address the investigation of Firestone ATX, ATX–2, and Wilderness tires. Secretary Slater refers to safety as the North Star of the Department of Transportation, and under his leadership we are committed to preventing deaths and injuries in motor vehicle crashes. Our program to investigate safety defects is the key part of that mission. I will give you a quick overview of the agency's authority to investigate safety defects and describe the procedures that the agency follows and outline the Firestone investigation.

First, our authority. Congress passed the basic motor vehicle safety law 34 years ago in 1966 and amended the law in 1974 to establish the current notification and remedy provisions. In brief, the law provides that if a manufacturer decides one of its products contains a defect that relates to safety, the manufacturer must notify the agency and owners to provide a remedy at no cost to the owners.

When the agency's screening process identifies a possible safety defect, the Office of Defects Investigation takes steps to open an investigation as a preliminary evaluation (PE). We inform the manufacturer and the public at this time.

If our review at the end of a PE suggests that further investigation is warranted, we move the investigation to a second stage.

That is the engineering analysis (EA) stage, and that is where we are at this point. In that phase we do appropriate test surveys and obtain additional information from the manufacturer. After the EA phase of the investigation, additional steps may ultimately be taken, which would lead the administrator to decide that a defect exists and order the manufacturer to recall. If necessary, we could go to court to enforce that action.

Our investigation of Firestone has reached the engineering analysis stage. Firestone originally began producing the tires under investigation in 1991 and by the end of 1999 approximately 47 million have been produced. It is important to see this in context, because by that time NHTSA had received 46 reports scattered over a 9-year period involving just these tires. The tires were on a variety of vehicles, primarily on Ford Explorers.

In view of the large number of tires that had been produced, a variety of possible causes of tire failure and the fact that all types of tires can and do fail in use, the reports that we received did not warrant opening a defect investigation regarding these tires at that time, again nearly a 10-year period, 46 complaints. Furthermore, the informal submission by State Farm in 1998 of 21 claims also was over a period of several years and included a population of 40-million plus tires, so that also did not trigger an investigation.

The situation changed rapidly following the airing of a news story at KHOU in Houston on February 7 that dramatized the question of tire safety. In addition to highlighting two fatalities, the story alluded to a number of other crashes and fatalities. Upon learning of the story, we contacted the station to obtain more details about the incidents. They have not given us at this time the information that we had requested, but the growing publicity generated other reports to us, including several provided by other media outlets and plaintiffs' attorneys.

Over the next few weeks we were able to verify many of the reports and opened a preliminary evaluation on May 2. At that time, the agency was aware of 90 complaints, including reports of 33 crashes and four fatalities.

Information accumulated rapidly as a result of the investigation and the attendant publicity. By August 1 we had 193 complaints alleging tread separations on these tires with 21 reported fatalities.

In a meeting of August 4 we suggested that Firestone consider recalling the tires. On August 9, Firestone announced that it would recall 14.4 million tires. As of August 31 we have 1,400 complaints with reports of 88 fatalities and 250 injuries.

NHTSA is continuing its investigation to determine whether additional tires need to be recalled. If we discover information that indicates a problem in any other tires we will move promptly to urge Firestone to expand its recall. We are closely monitoring the recall to ensure that Ford and Firestone promptly replace all defective tires.

Our review of data from Firestone has already disclosed that other tire models and sizes of tires under investigation have rates of tread separation as high or higher than the tires that Firestone is recalling. For that reason, on August 30 we recommended to Firestone that it expand its recall to include these additional tires. When Firestone declined to expand the recall, we issued a con-

sumer advisory on September 1 to advise owners of these tires and to take actions to assure their safety.

We now know that in September 1999 Ford asked Firestone to replace Wilderness tires mounted on Explorers that had been sold in the States around the Arabian Gulf, primarily Saudi Arabia. Similar actions were taken in the year 2000 in Venezuela, Colombia, Ecuador, Malaysia, and Thailand.

Ford would have been required to notify NHTSA of such an action if it had occurred in the United States, but our regulations do not apply to actions taken outside the United States. Ford thus had no obligation to advise NHTSA when it took these actions. If we find that we need additional legislative authority to require manufacturers to provide such information we will seek to obtain it.

A number of claims and several lawsuits have been filed against Ford and Firestone before we became aware of any trend that would indicate a potential defect. Our current regulations do not require the manufacturers to give us information about claims or litigation, and we are also exploring, therefore, measures that will allow us to track claims and litigation information routinely.

Mr. Chairman, I want to assure you this investigation is the highest priority at NHTSA. We will remain focused on the investigation and closely monitor the current recall campaign. We will also seek any expansion of the campaign that may be necessary. I want to conclude by expressing my thanks for your holding this hearing, and I will be willing to answer any questions.

[The statement follows:]

PREPARED STATEMENT OF SUE BAILEY

Mr. Chairman and Members of the Committee: I am pleased to appear before you this morning to address the investigation and recall of Firestone ATX, ATX II and Wilderness AT tires. This is the first subject on which I have appeared before Congress as Administrator of the National Highway Traffic Safety Administration (NHTSA), and I welcome the opportunity to address this important issue.

The agency's mission is to prevent deaths and injuries in motor vehicle crashes. Our program to investigate safety defects is a key part of that mission. I will give you a quick overview of the agency's authority to investigate safety defects, describe the procedures that the agency follows in its investigations, outline the Firestone investigation in that context, and share with you some of my observations about the investigative process.

OVERVIEW

First, our authority: Congress passed the basic motor vehicle safety law 34 years ago, in 1966, and amended the law in 1974 to establish the current notification and remedy provisions. In brief, the law provides that if a manufacturer decides that one of its products contains a defect that relates to motor vehicle safety, the manufacturer must notify the agency and owners and provide a remedy at no cost to the owners. When the defect is in a tire sold as original equipment on a new vehicle, the tire manufacturer is the responsible manufacturer, as opposed to the vehicle manufacturer, and the remedy may either be to repair or replace the tire.

The law gives us authority to investigate possible defects, to decide whether a defect exists, and to order a manufacturer to provide a remedy for any defect. If a manufacturer refuses to provide a remedy, the law authorizes us to go to court to compel it to do so. This is seldom necessary. In all but very rare cases, manufacturers agree to remedy the defect without our having to reach a final decision. In a typical year, we open between 80 and 100 defect investigations, of which more than half result in recalls. In addition, manufacturers conduct an average of 200 defect recalls each year that are not influenced by NHTSA investigations.

INVESTIGATIVE PROCEDURES

We receive complaints from a wide variety of sources about possible defects in motor vehicles and motor vehicle equipment. The sources include our toll-free consumer hotline, our web page, e-mail, phone calls, and letters. We enter all complaints into a database which is continuously screened by a team of five investigators in the agency's Office of Defects Investigation (ODI) to identify potential defect trends. In an average year, we receive between 40,000 and 50,000 complaints from these sources.

When the screening process identifies a potential problem, ODI takes steps to open an investigation as a "Preliminary Evaluation" (PE). We inform the manufacturer and the public at this time, and begin the process of gathering information from the manufacturer and other appropriate sources. We give the manufacturer an opportunity to present its views. Preliminary Evaluations are generally resolved within four months from the date of their opening. They may be closed if we determine that further information is not warranted, or if the manufacturer decides to conduct a recall.

If our review of information at the end of a PE suggests that further investigation is warranted, we move the investigation to a second stage, the Engineering Analysis (EA), in which we conduct a more detailed and complete analysis of the character and scope of the alleged defect. The EA supplements the information collected during the preliminary evaluation with appropriate inspections, tests, surveys, and additional information from the manufacturer. ODI attempts to resolve all EAs within one year from the date they are opened.

At the conclusion of the EA, we may close an investigation because the additional information does not support a finding that a defect exists or because the manufacturer decides to conduct a recall. If ODI continues to believe that the data indicate a defect, the Associate Administrator for Safety Assurance may convene a panel of experts from the agency to review the information. The manufacturer is notified that a panel is being convened and of the panel's result, and is given an opportunity to present new analysis or new data.

If the panel concurs with ODI, the next step is to send a "recall request letter" to the manufacturer. If the manufacturer declines to conduct a recall in response to this letter, the Associate Administrator may issue an "Initial Decision" that a safety-related defect exists. An Initial Decision is followed by a public meeting, at which the manufacturer and interested members of the public can present information and arguments on the issue, as well as written materials. The entire investigative record is then presented to the NHTSA Administrator, who may issue a "Final Decision" that a safety defect exists and order the manufacturer to conduct a recall. If necessary, the agency will then go to court to enforce such an order.

THE FIRESTONE ATX/WILDERNESS RECALL

With this description of our investigative procedures as context, I will turn now to the Firestone investigation.

Firestone originally began producing the tires under investigation in 1991. By the end of 1999, approximately 47 million had been produced. By that time, NHTSA had received 46 reports scattered over 9 years about incidents involving these tires. The tires were on a variety of vehicles, primarily on Ford Explorer sport utility vehicles. In view of the large number of tires that had been produced, the variety of possible causes of tire failure (road hazards, excessive wear, etc.), and the fact that all types of tires can fail in use, the reports that we received did not indicate a problem that would warrant opening a defect investigation regarding these tires. The informal submission by State Farm in 1998 of 21 claims over an eight-year period also did not provide such an indication.

The situation changed rapidly following the airing of a news story by KHOU in Houston on February 7, 2000, that dramatized the question of the tires' safety. In addition to highlighting two fatalities, the KHOU story alluded to a number of other crashes and fatalities.

Upon learning of the KHOU story, we contacted the station to obtain more details about the incidents. They have not given us the information we requested, but the growing publicity generated other reports to us, including several provided by other media outlets and by plaintiffs' attorneys. Over the next few weeks, we were able to verify many of these reports. We opened a Preliminary Evaluation on May 2. At that time, the agency was aware of 90 complaints, including reports of 33 crashes, and 4 fatalities. On May 8 and 10, we sent Ford and Firestone extensive Information Requests asking for information about the tires. At that point NHTSA began a constant communication with both companies, which continues today.

Information accumulated rapidly as a result of the investigation and attendant publicity. By August 1, we had 193 complaints alleging tread separations on these tires, with 21 reported fatalities. In a meeting on August 4, we suggested that Firestone consider recalling the tires. By August 9, when Firestone announced that it was recalling the ATX and ATX II tires, and Wilderness AT tires produced at its Decatur, Illinois, plant, we had over 300 complaints, with 46 reported fatalities. The number has continued to grow. As of August 31, we have 1,400 complaints with reports of 88 fatalities and 250 injuries .

Firestone has recalled all of the ATX and ATX II tires of the P235/75R15 size manufactured since 1991. It has also recalled Wilderness AT tires of that size made at its Decatur, Illinois, plant, for a total of 14.4 million tires out of the 47 million tires covered by our investigation. Firestone estimates that approximately 6.5 million of the 14.4 million tires included in the recall are still on the road. Ford and Firestone are taking a number of measures to provide replacement tires.

NHTSA is continuing its investigation to ensure that the scope of the recall is proper and that all unsafe tires are recalled. At our request, Firestone and Ford have given us voluminous information about the tires, and we have sent follow-up requests for additional information to both companies and to Goodyear Tire and Rubber Company, for a peer comparison. We are continuing to monitor the recall to ensure that all defective tires are replaced promptly.

Our review of data from Firestone has already disclosed that other tire models and sizes of the tires under investigation have rates of tread separation as high or higher than the tires that Firestone is recalling. On August 30, we recommended to Firestone that it expand its recall to include these tires. When Firestone declined to expand the recall, we issued a consumer advisory on September 1 to advise owners of these tires to take actions to assure their safety.

OBSERVATIONS

We now know that in September 1999 Ford conducted a campaign (referred to by Ford as an "Owner Notification Program") to replace Wilderness tires mounted on Ford Explorers that had been sold in the states around the Arabian Gulf (primarily Saudi Arabia). Similar actions were taken in Venezuela in May 2000 and in Columbia, Ecuador, Malaysia, and Thailand. Ford would have been required to notify NHTSA of such an owner notification program if it had occurred in the United States, but our regulations do not apply to actions taken outside the United States. Ford thus had no obligation to advise NHTSA when it took these actions. If we find that we need additional legislative authority to require manufacturers to provide such information, we will seek to obtain it.

A number of claims, and several lawsuits, had been filed against Ford and Firestone before we became aware of any trend that would indicate a potential defect. We received no information about those events from the companies or from the plaintiffs' attorneys. Our current regulations do not require the manufacturers to give us information about claims or litigation. The existing law gives us broad authority to seek information from vehicle and equipment manufacturers during the course of an investigation. We are exploring measures that would allow us to track claims and litigation information routinely.

Mr. Chairman, I want to assure you that this investigation is the highest priority in NHTSA. We will remain focused on the investigation, closely monitor the current recall campaign, and seek any expansion of the campaign that may be necessary.

Mr. Chairman, I want to conclude by expressing my thanks to you for holding this hearing. I will be glad to answer any questions you may have.

WAS BRIDGESTONE/FIRESTONE AWARE OF DEFECTS?

Senator SHELBY. Mr. Crigger, do you want to join Mr. Ono, and is there someone else you want to bring up?

I would pose this question to Bridgestone/Firestone. You settled several lawsuits involving Firestone tires, the ones we have been talking about, as early as 1996. Did that not make you aware that there were issues with the tires, problems with the tires and if not, why not? And did that cause you in any way to review the failure rate of the tires, the design, or the manufacturer of the tires?

Mr. CRIGGER. Senator, those individual cases, those individual lawsuits were all individually investigated by our tire engineers doing forensic analysis on the tire, and in those cases we found in

the preponderance of outcomes that the tires were failed because of punctures, improper repairs, overloads, or other kinds of outside influences. As you know, the tire operates on the road all the time and is subject to all of that kind of impact and other trauma, so nothing we learned there led us to believe there was a defect of any kind with the tire.

Senator SHELBY. Did you not have reason to believe that the Firestone tire problems that we have been talking about could have been a defect in the manufacture?

Mr. CRIGGER. Sir, I am not saying there is never a defect in the manufacture. I am not saying that at all. I am saying that in the individual cases that were reviewed one by one as they came to us, or became apparent, that is not what we found. I wish there had been some indication from that, that we could have done something that would have been different from where we are today.

Senator SHELBY. What does it take to put someone, a company like Bridgestone/Firestone or any other big company on notice that perhaps they have got a defective product out there? You have got lawsuits, you have got people killed, injured and so forth, not one, not two, but a lot of them. You settled those lawsuits, or most of them, and you put a gag order on them. It is a sealed settlement with a gag order. Does that not tell you something, that something is probably wrong with your product? What does it take?

Mr. CRIGGER. Sir, my understanding is that the confidentiality orders applied only to trade secret and formulations and these kinds of matters and, of course, the judge had to agree that those were trade secrets, or industry trade secrets. In reviewing the cases, there was nothing to indicate that there was a tire defect.

We understood that we have millions of these tires on the road, over 40 million of this particular Wilderness type, ATX type tire, and individual cases do occur and, as tragic as they are and, believe me, each one affects the members of the Firestone family dealer——

Senator SHELBY. But Mr. Crigger, this is not just a random situation. This is a pattern, is it not, tied to this particular tire and tied to this vehicle, and so forth, not one, not two, but dozens or hundreds.

Mr. CRIGGER. Sir, that pattern only became apparent this year, when we were looking particularly in the July and August time period doing the analysis, some of which has been referred to here by Ford. We were doing that joint analysis with them on data that would not normally have been used to evaluate tire performance.

PROVIDING DOCUMENTS TO NHTSA

Senator SHELBY. Has there been a request by NHTSA for all your internal documents related to the problems with this tire?

Mr. CRIGGER. Yes. We have complied with NHTSA's request for such documents.

Senator SHELBY. When was this?

Mr. CRIGGER. During the preliminary evaluation.

Senator SHELBY. But that has not been made public in any way. This is just between you and the governmental agency, is that right, Dr. Bailey?

Dr. BAILEY. At this time, right.

Senator SHELBY. Have you received all of those documents?

Dr. BAILEY. Yes. They have been forthcoming. We have received virtually all of the documents.

Senator SHELBY. Have those documents been evaluated?

Dr. BAILEY. That is part of the evaluation that is ongoing.

Senator SHELBY. So there has not been yet.

Dr. BAILEY. Many of them have been. That is why we have information that encouraged us to do the advisory to the consumers.

Senator SHELBY. Dr. Bailey have you also requested from Ford documents and memos dealing with this issue?

Dr. BAILEY. Absolutely.

Senator SHELBY. Have they complied?

Dr. BAILEY. They have complied as well.

Senator SHELBY. And is this investigation going on now to evaluate these documents?

Dr. BAILEY. Yes. The evaluation is going on. We are in the engineering analysis phase of the evaluation, so there is additional work that we continue to evaluate the data.

Senator SHELBY. Dr. Bailey, does it concern you in your capacity as head of NHTSA that Bridgestone/Firestone and Ford, I believe, concealed a lot of this information rather than tell the public?

Dr. BAILEY. The manufacturer has a responsibility, once they detect a defect, to notify us. We will also be looking at the timing of that notification and other aspects of the case that are undergoing investigation now, so yes, of course it is a concern.

FIRESTONE TIRES ON FORD VEHICLES IN SAUDI ARABIA

Senator SHELBY. I think it was in the paper today, one of the papers if not all of them, about the Ford internal memo—I am sure you are familiar with that—that said Ford Legal has some major reservations about the plan to notify customers in the Middle East. Now, on your own volition, did someone at Ford notify NHTSA regarding this problem that they had?

Ms. PETRAUSKUS. We did not.

Senator SHELBY. Yes or no?

Ms. PETRAUSKUS. No, we did not notify NHTSA at the time. We sent letters to our dealers announcing that we would replace the Firestone tires our customers had with Goodyear tires. Our decision—and I might add, if I may, Mr. Chairman, by coincidence the day before, the day before the memorandum you referred to we received a letter from Bridgestone/Firestone telling us that in their view there was nothing defective about the tires we had in the Mideast, nothing defective, and that the U.S. performance of those tires was very good.

The reason they had sent us the letter is because we asked for it. We wanted, as we were taking the action in the Middle East we wanted to be sure that there was no application of this issue to the United States, so we looked at our own information, we looked at the Government's information, and we asked Firestone for their information. Ultimately, what we decided to do, because Firestone declined to cover these tires under their warranty, and I am talking about the Middle East now, for the very reasons that Mr. Crigger has mentioned, we had unhappy customers. We went to Goodyear and used their tires.

Mr. CRIGGER. I would just like to add that we had a joint survey of the tires in question in Saudi Arabia with Ford, and the investigation of those tires showed that the majority of them had been run underinflated. I believe Ms. Petrauskus has talked about that anecdotally as well. There were instances of them being deflated, run in the sand, and there were punctures. There was nothing for us to believe the tire itself was defective.

TIRE MANUFACTURING DIFFERENCES

Senator SHELBY. Let me ask you this, Mr. Crigger. Are your tires, these two tires we are talking about, are they designed and manufactured differently, drastically or in some ways differently, say, from Michelin or Goodyear or any of the other tires manufactured? In other words, is that a different engineering process, or is the tire manufactured the same?

Mr. CRIGGER. That would be a question that would be better for me if I could have our quality assurance person——

Senator SHELBY. Is the manufacturing of the Firestone tires that are in question here basically different from the manufacturer of similar tires by other companies, and if so, how, and why?

Mr. WYANT. There would be certain generic relationships between the manufacturer of the tire, such as the molding process and parts of the tire assembly process, but within the tire industry there are many, many trade secrets.

Senator SHELBY. I understand that. I am talking about the basic manufacturing, though.

Mr. WYANT. Basic, basic would be very similar, of course.

Dr. BAILEY. Mr. Chairman, could I just add that NHTSA does what we call a peer analysis, and we have requested information from Goodyear, for instance, so that we can look at the comparables that I think you are discussing.

Senator SHELBY. Mr. Crigger, when the number of claims of a product is out of line in your tire or other products you make at Bridgestone/Firestone, does that alert you that something is wrong? Let us say you are making these tires, and you make other tires, and I am sure you do, and you are having complaints with, say, two product lines, a lot more as compared to seven others, does that not alert you that something is wrong there?

Mr. CRIGGER. Mr. Chairman, unfortunately here in hindsight I wish it did, and we now are indeed looking at claims, and some of these other factors in the evaluation of tire performance, but prior to this case tires were evaluated in performance based on testing that was done prior to their release, and on a continuing basis based on adjustment data, which is warranty claims data that is reviewed on the basis of customer comebacks and field research, looking at tires that are coming back from the field, and none of those indicators pointed to any kind of a problem with the tire line we are talking about here.

After we did additional work, indeed, in conjunction with the preliminary evaluation and pulled in information that would not normally be part of tire performance evaluation, because claims and lawsuits are not considered to be representative throughout a line, they are considered to be individual cases that occur for a variety of reasons, so they have never been part of performance evaluation.

As I said earlier, I wish they had here, because that is a part of the analysis that turned us into looking at this particular problem and taking the action that we did.

Senator SHELBY. Senator Lautenberg.

Senator LAUTENBERG. Thanks, Mr. Chairman.

SUV'S AND OTHER PASSENGER CARS RELATIVE SAFETY

Ms. Petrauskus, in your comparison of fatality rates, the chart that had passenger cars and Explorers, the Explorer fatality rate was on the same measure significantly lower than passenger cars. I wonder if you have got any information, any data that tells you how many people died in cars as a result of collisions with SUV's.

Ms. PETRAUSKUS. That data are available, because one of the things that NHTSA does in the way they maintain the data—and I do not happen to have it with me, but it provides detail both on multiple collisions and has pretty good information in terms of the various sizes of vehicles involved.

Senator LAUTENBERG. Well, we are going to get to the principal tire question, but one of the things that is raised about the Explorer is the fact that the bumper heights and other factors, weight, et cetera, are less likely to produce a fatality in a collision with a passenger car than you would normally get between two passenger cars.

Ms. PETRAUSKUS. Senator, I think the issue you raise is, while not related to the subject of this hearing is an important one, and that is the whole question of compatibility and how—what is it that we can do, while still giving customers a choice of vehicles, to help assure, when different kinds of vehicles strike one another, when vehicles weighing different weights—what can we do to improve or reduce the risk to people in both vehicles involved in the accident.

Senator LAUTENBERG. Well, it also could relate to tire problems if there is a separation and a crash occurs between a passenger car and an SUV that has been rendered somewhat disabled by the loss of the tire tread, so if you could help us, if that information is available—Dr. Bailey, does NHTSA have that?

Dr. BAILEY. I would take that for the record and provide you that information.

[The information follows:]

NHTSA does not have complete information on the outcome of crashes between passenger vehicles and SUV's where the SUV was disabled by the loss of tire tread. The following the information from the Fatality Analysis Reporting System lists the number of occupant fatalities in two-vehicle crashes by vehicle type.

OCCUPANTS FATALITIES IN TWO-VEHICLE CRASHES

[FARS 1995–1999]

YEAR	OCCUPANTS VEHICLE TYPE	KILLED	OCCUPANTS VEHICLE TYPE	KILLED	TOTAL
1995	PASSENGER CAR		PASSENGER CAR		4,277
1995	UTILITY VEHICLES		UTILITY VEHICLES		29
1995	PASSENGER CAR	762	UTILITY VEHICLES	193	955
1996	PASSENGER CAR		PASSENGER CAR		4,209
1996	UTILITY VEHICLES		UTILITY VEHICLES		29
1996	PASSENGER CAR	892	UTILITY VEHICLES	241	1,133

OCCUPANTS FATALITIES IN TWO-VEHICLE CRASHES—Continued

[FARS 1995–1999]

YEAR	OCCUPANTS VEHICLE TYPE	KILLED	OCCUPANTS VEHICLE TYPE	KILLED	TOTAL
1997	PASSENGER CAR		PASSENGER CAR		4,146
1997	UTILITY VEHICLES		UTILITY VEHICLES		39
1997	PASSENGER CAR	966	UTILITY VEHICLES	246	1,212
1998	PASSENGER CAR		PASSENGER CAR		3,800
1998	UTILITY VEHICLES		UTILITY VEHICLES		47
1998	PASSENGER CAR	1,049	UTILITY VEHICLES	254	1,303
1999	PASSENGER CAR		PASSENGER CAR		3,585
1999	UTILITY VEHICLES		UTILITY VEHICLES		68
1999	PASSENGER CAR	1,025	UTILITY VEHICLES	275	1,300

Senator LAUTENBERG. Thank you.

CAR MANUFACTURER'S SAFETY RESPONSIBILITY

Dr. Bailey, you said in your statement whether it is just reporting a fact or whether it was an editorial comment, the fact is that the automobile manufacturer is not responsible for tire problems, the car manufacturer. Am I correct, the fact that that is in your testimony?

Dr. BAILEY. Yes, sir, that is correct.

Senator LAUTENBERG. Now, what do you think about that? Are you simply stating a fact, or is that an opinion of NHTSA's and yours?

Dr. BAILEY. It is a fact that at the time there was no obligation to report that. That is something we are looking at today.

Senator LAUTENBERG. Well, it goes deeper than reporting. It says, when the defect is in the tire sold as original equipment in a vehicle, a new manufacturer, the tire manufacturer is responsible as opposed to a vehicle manufacturer, and thusly the remedy may be either to repair or replace the tire.

But that absolves the automobile manufacturer of selling a product that they may have information about that represents a danger, and I wonder whether, in your judgment, that is a good way to do it, or is there something in overriding law that says, listen, you cannot—even if you are not responsible for wear and tear on the product, which is often the disclaimer when tires are sold, you know, normal wear and tear, et cetera. But when a product is sold that is known to be dangerous, I wonder if that does not change the condition of the manufacturer's responsibility.

Dr. BAILEY. Senator, are you referring to the overseas information or to their responsibility to notify NHTSA of a defect?

Senator LAUTENBERG. Well, there are two parts of this. One is to notify NHTSA, the other is to clearly notify the public and protect the public, and I am looking for what it is we can do. We will get to NHTSA's responsibility, but what can we do to protect the public?

Dr. BAILEY. Well, again I want to clarify that if a defect is known by a manufacturer, they have 5 days in which to notify NHTSA.

Senator LAUTENBERG. Maybe we will have to ask Ms. Petrauskus.

Ms. PETRAUSKUS. Just using our experience in Saudi Arabia as an example, at the time we took the action to replace the Firestone tire with Goodyear tires we did not believe there was any defect in the Firestone tires, but let me just say we did not want those tires—the reason we did it was, we had unhappy customers, so putting aside our legal obligation to our customers under some warranty, we felt we needed to give them different tires because they were unhappy with the ones they had and, again, we took the action, even though we believed and saw with our own eyes the same things that Mr. Crigger reported.

Senator LAUTENBERG. I want to get to a more generic review, and that is, does the Ford Motor Company feel no obligation if it is selling the car even though it does not—and correct me if I am wrong, by the way, about what the representation is about the tires. Does the Ford Company remain removed from any responsibility for what happens to the tires?

Ms. PETRAUSKUS. Absolutely not. A customer comes in and buys a Ford vehicle, a Ford-branded vehicle, it expects that vehicle to have tires, and he chose our vehicle, so I really feel we have a responsibility for the overall performance of the vehicle, even though if you go into your glove box and you pull out the warranty manuals you will find one warranty manual from the car manufacturer and one warranty manual for the tire manufacturer, and there are long historical reasons for that, but our whole approach in this arena has been that at the end of the day we have to be responsible and responsive to our customers, and that is why we took the actions we did overseas.

We had unhappy customers. We were going to take care of them, and we were not going to spend a lot of time worrying about who had warranty responsibility.

Senator LAUTENBERG. I think it goes beyond that, and this question gets resolved at some later date, and that is, what is the responsibility? I normally ask Senator Specter. He is pretty much our resident expert on the law, but is there not a responsibility, when a product is sold, regardless of who manufactures the various parts, to represent, or to take the responsibility for the safety of the product?

Senator SPECTER. The answer, Senator Lautenberg, is in fact yes, there are express warranties which arise here and the documents refer to them. They are implied warranties of merchantability and fitness for purpose. Under the Uniform Commercial Code they are obligated under the laws of warranties to provide products of merchantable quality, which these were not fit for the purpose.

Dr. BAILEY. Senator, can I add there is a statute in effect here. Tires are treated differently than other components of vehicles. All the other components of a vehicle are the responsibility of the automobile manufacturer, but the tires are treated separately under that statute, and that is the responsibility of the tire manufacturer.

Senator LAUTENBERG. We cannot get away from the answer that Senator Specter just gave us. The fact is that they can define it as you would like, but you cannot sell a product that may be faulty without—and disown the responsibility that you inherit when you sell the product. That is pretty clear, and I think that probably in a court of law that would be the case.

Thanks, Mr. Chairman.

Senator SHELBY. Senator Specter.

Senator SPECTER. Thank you, Mr. Chairman.

OBLIGATION TO EVALUATE ACCIDENT DATA

It may be harsh, but candidly the testimony of the Firestone and Ford witnesses here today strains credulity. It is very difficult, really impossible to accept statements with all of the incidents which had occurred that Firestone and Ford did not know that there was a substantial defect, design defect in the manufacture in the face of the chronology and the numerous reports about tread separation.

When you parse and dissect the testimony which is presented here, you have Mr. Crigger testifying that finally there was an analysis on data not ordinarily used. Well, in 5 minutes I cannot question you, Mr Crigger, on data which is not ordinarily used, but it would seem to me that in the face of what you have here, that every effort would have been made for every conceivable kind of analysis to have been made as opposed to somewhere in the long process you come to, quote, "an analysis on data not ordinarily used", and then you testified that in the majority of the situations they were underinflated.

Well, that does not tell us very much. How about the rest of the cases? The majority leaves a great many other situations, so it is not helpful to attribute underinflation if there are many incidents where underinflation was not a factor.

And Mr. Crigger, you testified that lawsuits are not a part of performance evaluation. That testimony candidly to me is shocking. When you have a lawsuit and you have a defective tire, as a matter of defense, these tires are submitted to your forensic experts to prepare for the litigation where you are being sued, and to ignore those instances is candidly incredible. As you testified, lawsuits are not a part of performance evaluation.

Mr. CRIGGER. Could I address that point, sir?

Senator SPECTER. You may.

Mr. CRIGGER. I think you may have misinterpreted. I was talking about performance evaluation of the line. It is clearly an investigation of the performance evaluation of the tire involved in that lawsuit, absolutely.

Senator SPECTER. Well, Mr. Crigger, did I misquote you? I wrote down, quote, "lawsuits are not a part of performance evaluation", close quote. Did I misquote you?

Mr. CRIGGER. No, sir, but the context was meant to be talking about the evaluation of the entire line of tires, like the 40 million tires that were made.

Senator SPECTER. Well, let us take it your way, the entire line of tires. Why not utilize that kind of information in evaluating the entire line of tires? After all, what we are looking for here is what is happening with all the rest of the tires. Do these defects which come up in a lawsuit not put you on alert that you have got a problem here which may exist in some other tire?

Mr. CRIGGER. Yes, sir. We said in hindsight we wish we were looking at lawsuits and all of these other things in conjunction with——

Senator SPECTER. We are not concerned about hindsight. Why did you not look at it at the time you had this tangible evidence of the problem?

Mr. CRIGGER. Normally it is the tangible evidence of indeed a problem, and the point of the lawsuit is to discover what was that problem, and as I indicated, it did not indicate a defect in the tire. The lawsuits, or many—I do not have the specific number for you now—indicated that there were improper repairs that were at fault, there were punctures at fault——

Senator SPECTER. Well, you can attribute a number of factors to a number of cases, but you had such an overwhelming number of reports on tread separation.

Well, let me move on here to Ford. Ms. Petrauskus, you testified that it was only on July 27, when you got the data as to what had been turned over to NHTSA, that Ford began to understand the nature of the problem, the design defect on tread separation.

Well, how about all of these other indicators? Didn't Ford have an obligation to make an independent evaluation, look here, as between Firestone and Ford the litigation may never end, and my legal judgment is that Ford is responsible for that total vehicle?

You may have a very good claim over against Firestone so that they will be obligated to indemnify you if there is anything left of Firestone, but with all the indicators that Ford had, why didn't Ford make an independent evaluation here very early in the process, instead of coming here today and saying, we did not know what happened until Firestone turned the materials over to NHTSA?

Ms. PETRAUSKUS. Senator, I believe we did have an obligation to make an independent inquiry, and I believe we can demonstrate that we made that independent inquiry. We looked at every single data base that was available to us, beginning in 1999, and we looked at NHTSA's data, we looked at our lawsuits that we were aware of, we looked at our claims data, we looked at our owner reports, and we looked at our warranty reports, and none of those, none of those, sir, showed the kind of dramatic difference in claims performance that we saw with regard to the Firestone data.

Throughout this period, sir, we asked Firestone to review their U.S. data base. The data base we saw on July 28 we had never seen before, and traditionally in the tire industry has been kept proprietary.

REQUEST FOR INTERNAL DEFECT DOCUMENTATION

Senator SPECTER. Well, my red light is on and I will not use too much more time, Mr. Chairman, but I would start with asking Ford and Firestone officials if you would be willing to make available to this subcommittee all, every last one of the documents which relate to the kinds of defects which you saw around the world.

Ms. PETRAUSKUS. Just to make sure I understand, we have provided all claims, all complaints, all warranty data to NHTSA. We have provided that data without asking for any confidential treatment for it. Is that the data you wish to have, sir?

Senator SHELBY. I think his question is, would you provide all information.

Senator SPECTER. We are going to have to go through these documents with a fine tooth comb to see what has been done here, and the problems about concealed documents are legendary in this kind of a situation.

Mr. Chairman, I asked a question on a voluntary basis, but it seems to me this subcommittee really would be best advised to issue subpoenas here, because when subpoenas are issued there is a legal obligation to produce and failure to do so constitutes obstruction of justice. If it is just voluntary it does not happen. But this is the kind of a chronology which just strains credulity. That is the nicest way I know of how to put it.

Mr. Chairman, I would like to ask Dr. Bailey just one or two questions, if I may.

Senator SHELBY. Go ahead.

NHTSA REQUESTS ADDITIONAL MOTOR SAFETY AUTHORITY

Senator SPECTER. Dr. Bailey, we heard Ms. Claybrook testify about your need for much more authority and ways to impose fines and to get documents on a daily basis. Would you take a look at what Ms. Claybrook has testified to and inform this subcommittee as soon as you can what you would like to have to have more teeth in your operation?

Dr. BAILEY. In fact, those are all on the record with Congress today. Those are four of the issues we would like to see come into law. That is, to increase our ability for penalties, compliance, and extend the recall years.

Senator SPECTER. You have already made recommendations on everything you would like?

Dr. BAILEY. Yes, sir, we have, in March.

Senator SHELBY. Would you reiterate that list for the record?

Dr. BAILEY. On March 24 NHTSA sent Congress legislation to amend the motor vehicle safety statutes. To date, no one has introduced legislation, but conversations are ongoing. It is possible we may have to address it as introduced by a request, because we feel they are very essential, particularly to the discussion we are having here today and to this investigation.

One is the modification of civil penalties as to increased penalties, which you heard at this point are at a rate at—$925,000 is the max. We want to go up to at least $4 million.

We want to improve our recall compliance. That means taxi companies, fleets would have to comply.

We would want to extend the recall limits up to 10 years.

And finally strengthen the compliance testing. You heard that we asked for certification for compliance, but we now want testing prior to that certification, to self-certification on the part of the manufacturers. Those are the four main points.

Senator SPECTER. Dr. Bailey, would you like to see the testimony which was reported this morning by our first panel, by Ms. Claybrook and also by Mr. Pittle, which would authorize Federal prosecutions for willful failure to inform the public, reckless disregard for the safety, such as has arisen in situations like this?

Dr. BAILEY. That is a legal question that I think I would like to take for the record, but I think clearly we would like to see information in the public domain, and particularly available to the Gov-

ernment, that would allow us to know when to do an investigation that could protect the American public.

Senator SPECTER. Well, that is a legal question, but you are the Administrator of the National Highway Traffic Safety Administration. I would like you to give some thought to it and to give the subcommittee an answer.

Dr. BAILEY. I will provide you that.

[The information follows:]

As Secretary Slater has stated, for egregious circumstances the Department of Transportation supports criminal penalty authority, appropriately placed in the motor vehicle safety statute, for those who knowingly and willfully violate the law.

Senator SHELBY. Senator Mikulski.

Senator MIKULSKI. Thank you very much, Mr. Chairman. I would just like to say to my colleagues what a wonderful, robust hearing, and the way we are working on a bipartisan basis is really what the American people expect of us, and I look forward to doing more like this.

Mr. Ono, let me first of all welcome you to the committee, and number one I would like to express my respect to you for being here. I would also like to express my appreciation for your very earnest effort to speak in English and to communicate to the committee. It is appreciated, and also the respect that you, yourself showed to the committee by even being willing to appear.

CORPORATE RESPONSIBILITY TO PUBLIC SAFETY

I have no doubt, sir, that your apology is sincere, yet however I think you would acknowledge that this is a very disturbing timetable and situation that we are finding. My questions to the Bridgestone/Firestone team that you brought, first of all I must say, in keeping with the testimony of the committee and the line of questioning by Senator Specter, the fact that you did not meet with NHTSA until August 8, and did not issue a recall until August 9, after years of problems internationally really do bother me.

I do not know about the legal definitions of failure to inform and failure to alert, but I know that there is an obligation of every human being to help one another if they see a sign of distress.

If I walked into a hotel room and found a prescription drug that somebody had left, and I would be worried that he was either a diabetic, or heart medication, I would be calling lost and found so that I could help them. If I am walking down the street and I see a vehicle coming towards a child or an adult, I am going to yell, look out, danger is coming.

Where was your sense of concern as a human being, and as well as a corporate entity, to yell, look out, America, these tires are coming apart? So I do not know about all of the legal definitions, but I do know you had a moral obligation, and I know that the committee will be pursuing it, and I fully support the line of direction that Senator Specter is recommending to the committee.

Now, Mr. Crigger, I am not going into repeating that, but Mr. Wyant, I have a question for you. So much of this seems to be at Decatur. You are Mr. Quality Control. What the hell was going on at that Decatur plant? What did you know? Who was standing sentry, and what kind of mechanisms did you have in place to observe this?

The problem begins at the point of manufacture. It then goes on to the vehicle. What goes on at Decatur? Is Decatur the only factory, and what did you have in place to prevent this?

Mr. WYANT. In the case of Decatur, I have to explain a little bit of background to make it understandable, and I am actually supporting what Mr. Crigger has said, so if you will bear with me for a moment. Our normal measures of measuring tire quality within the industry and within NHTSA and as occasionally reported to our customers like OEM's is the warranty adjustment data, and the reason for that is, you can see trends over time, because there is volume there and it is statistically significant.

Senator MIKULSKI. I appreciate that, sir, but I only have 10 minutes to ask questions. Do you have inspectors on the line?

Mr. WYANT. Pardon?

Senator MIKULSKI. Do you have inspectors on the line?

Mr. WYANT. Yes, we do. In the case of Decatur it is the same as in all our other plants. We inspect the products all the way from the raw materials through the quality control systems, through the product going out at the end of the plant, yes.

Senator MIKULSKI. Is this a defect in manufacturing or design?

Mr. WYANT. That is not determined. We made the recall without knowing that issue, and it is a key issue, and it is being investigated by the best minds in the country, if not the world.

Senator MIKULSKI. When did you start this investigation of best minds in the country?

Mr. WYANT. Pardon?

Senator MIKULSKI. When did you start the investigation of best minds in the country?

Mr. WYANT. I am going on memory here. It probably started somewhere around the end of July time period, I believe.

Senator MIKULSKI. Now, when these tires were coming apart in Saudi Arabia and Venezuela, didn't best minds—did you not want to mobilize the best minds in the country then?

Mr. WYANT. As I believe it was explained, that was a local circumstance, a performance issue within Saudi Arabia, including extremely—very high speeds, and that was deemed to be a customer satisfaction issue by the Ford Motor Company.

Senator MIKULSKI. Well, I am deeply concerned about, obviously there are defects that best minds in the country did not—the so-called best minds in the country did not go to work until July, after all of this began to unravel around the world much sooner. For whatever reasons, best minds in the country, I do not get the feeling that there was a sense of urgency over really standing sentry here.

Now, we are going to follow the lines of investigation that Senator Specter said, and I see my little yellow light is on so I am not going to pursue this at this minute, but I urge the committee to pursue this further.

NHTSA'S BUDGET AND AUTHORITY NEEDS

Dr. Bailey, if I could turn to you, please, and thank you for actually your work. I am going to ask you first about your budget. As I understand it, what we were able to move through the Senate floor because of our own constraints, your budget is $105 million

below the President's request. As we look forward to conference, putting us aside and putting even OMB aside, could I ask you to tell us, what is it that you need to really do the job of the mission of the agency for this 21st Century?

The number of vehicles are increasing, speed on the road is increasing, the variety of vehicles is increasing. What will it take in terms of both money and staff for you to do your job?

Dr. BAILEY. As you know, we requested $100 million more for the budget than what we are looking at today, which is about $400 million. In fact, for safety assurance about $12 million was requested in the President's budget. Specifically, we are hoping that we will be funded at that level, because as you heard, here today we are going to be required to complete this investigation in a timely manner, and I think considering the effort that is being expended at this time and it is on this investigation, we have to imagine our ability to control an investigation at this level, or if we were required to expand that.

Senator MIKULSKI. Well, what I would like to request is that you submit to the committee directly—I mean, you can get OMB's nod and all those clearances I know you have to go through, but I think it would be very helpful to the chairman and so on if we had a sense from you, what would it take to do the job and the number of people, knowing that this is not the time to really do add-ons, but so that you can really do that, and I think as we go through our conference and reconciliation that we could be of use to you.

Second, I would also invite for you to respond to Ms. Claybrook's set of recommendations on new standards, criminal penalties and so on, after you have had a chance to really review that to see what policy changes you would recommend that we pursue.

Third is this international warning. My passion is public health, and I know you are also keenly interested, so it is the early warnings, even whether they are in our own country or around the world, that I think is so important, whether it is the right to inform, but the right to alert.

One of your jobs is the need to alert. Could you share with us what you think we need to do especially to have a radar system for what is going on, or a CDC mechanism. You know the appropriate language for the highway community, the highway user community, but do you think that is an important policy change?

I mean, if we are going to have a national ballistic missile system to protect us against North Korean missiles, I would like to know what is the—or infectious disease from CDC, what can we do for this, to know what is going on around the world?

Dr. BAILEY. Clearly, it is an essential focus of ours as well. Let me just back up and say by the way, though, we clearly will provide you with our policy recommendations. All of those, as you heard the amendments are already underway. We are also looking to update the tire standards. So much of what you heard in earlier testimony is underway at NHTSA today, and I will certainly be pushing those policies.

As far as our information in a global marketplace, I think that would have been essential to us to have that information earlier, so we are at this point looking at our current regulatory authority as to whether or not it could be expanded so that we can obtain

that information in a timely manner. So you are right, we are going to know when to scream, "Look out!"

We are going to certainly work with Congress if a statutory remedy would be required to that end, because I do believe it is essential.

Senator MIKULSKI. Well, I think what we want to do is look to how we can help improve your statutory regulatory authority without going through a legislative debate that gets us into other quagmires often resolved in the Judiciary Committee.

[The information follows:]

This computer disc contains communications from the Department of Transportation to the Congress regarding additional funding and authority for motor vehicle defect investigations at the National Highway Traffic Safety Administration. Members of the Subcommittee on Transportation of the Senate Committee on Appropriations requested this information during the Hearing on September 6, 2000.

SEPTEMBER 12, 2000.

The Honorable RICHARD C. SHELBY,
Chairman, Subcommittee on Transportation,
Committee on Appropriations, United States Senate, Washington, DC.

DEAR MR. CHAIRMAN: This letter is to notify you of a change in the NHTSA fiscal year 2001 President's budget request and to request your approval of this change as you conference the fiscal year 2001 Transportation Appropriations Bill. The Administration requests an additional $9 million for the Defects Investigation Program. This additional funding would bring total funding for this program in fiscal year 2001 to $20 million.

The Administration is committed to enhancing the current defects investigation program. The additional $9 million requested will be used to enhance testing, modernize information systems, improve the timeliness of ODI processing of the increasing number of complaints, and enhance public awareness of NHTSA's defects investigation program. Attached is more detailed information on the increased funding requested.

These funds will complement the $1.8 million reallocated by NHTSA to the Bridgestone/Firestone investigation. In order not to increase the overall funding requested in the President's Budget, the Administration proposes $9 million in reductions to other NHTSA research programs.

I appreciate your consideration of this request. If you have any questions, please contact me or NHTSA Administrator Sue Bailey at 202–366–1836. Identical letters have been sent to Chairman Frank Wolf, Senator Frank R. Lautenberg and the Honorable Martin Olav Sabo.

Sincerely,

RODNEY E. SLATER,
Secretary, Department of Transportation.

ATTACHMENT

To enhance the defects investigation program, NHTSA requests additional fiscal year 2001 funding of the following:

$2.5M.—To provide for enhanced testing at the Vehicle Research and Test Center (VRTC) in East Liberty, Ohio, and possibly other test facilities. VRTC conducts most of the testing to support ODI's defect investigations. Funds are used to purchase vehicles and equipment necessary to conduct tests, to update instrumentation, to purchase time on the various test sites/equipment (VRTC rents laboratory space and must also pay for certain tests on equipment/sites owned by a private company), and to utilize contract support staff. ODI tries to complete its investigations within 16 months. However, investigations that involve complex testing frequently take as long as 2–4 years due to the shortage of testing resources. This funding will allow ODI to shorten this time period and thus enhance an already creditable process.

$1.5M.—To provide funds to modernize and enhance the ODI database to incorporate analytical intelligence, integrate optical image retrievals, and hardware. Funds are necessary to complete a comprehensive user needs study, upgrade hardware and software, upgrade search capabilities, and to provide better access to statistics and data on equipment such as tires and child safety seats. In addition, ODI would be able to integrate the optical image consumer complaints system with the office network to allow retrieval of complaint images at each investigator's desktop.

$1M.—To provide for internet access to ODI public files. Currently, optical images are made of ODI's public files and provided to the Technical Information Services office for use by the public. There is no means for the public to access these documents via the Internet, and this access has recently become in great demand due to the highly publicized Bridgestone/Firestone investigation. This funding would provide funds necessary to purchase the hardware, including a CDROM multi-disk player, web server, optical server, database software licenses, internet router, and the services of a data base manager and web site designer to make this data available to the public.

$2M.—To enhance and improve procedures for tire testing. This effort is comprised of several tasks. First it entails a complete review of existing standards, industry practices, international practices, and other applicable standards. For FMVSS 109, review the strength, debeading, endurance and highspeed requirements. It will permit us to review and improve test procedures currently used to evaluate tires, with emphasis on consideration of replacing current laboratory tests with on-vehicle tests or other equivalent dynamic tests. It will permit development of new test procedures on belt separation, one of the most common failure modes of radial tires. It will permit evaluation and development of performance requirements for technological advances in tire safety, including low tire pressure warning systems. It will augment crash data collection to capture information regarding tire failure.

$1.4M.—Improve the timeliness of ODI's processing of large amounts of information and process new information that is proposed to be required. An additional 30 people, 22 in ODI, 4 are the Vehicle Research and Test Center engineers/technicians and 4 legal staff are requested. ODI currently has 45 staff members.

The 22 new staff members proposed include eleven investigators (ODI currently has 17), five data entry and document control staff (ODI currently as 2), four screeners (ODI currently has 4), two clerical support (ODI currently has 2) and funds to upgrade hotline support. ODI needs additional staff due to the large increase in the number of complaints that ODI has received over the past year (complaints rose from under 30,000 to over 50,000), the complexity of motor vehicles, and the increase in the number of vehicles on the roads. This large increase in complaints was not projected at the time the 2001 budget was proposed. We expect complaint levels to rise even further with the media coverage of the Firestone recall. The $1.4 million also includes an additional $150,000 to enhance hotline operator awareness of automotive issues.

$.5M.—Even with the increased media emphasis on the Firestone investigation, the public still does not know to report potential defects to NHTSA. NHTSA cannot improve the safety of consumers unless the information it uses to analyze problems is correct. As a step in correcting this, NHTSA is requesting legislative authority to mandate that automobile manufacturers share complaint information with NHTSA. A media campaign should also be conducted to ensure that the public realizes that complaint information needs to be provided to NHTSA. Given that this information is the basis for the NHTSA program, we must leave no stone unturned in ensuring that NHTSA has the best information possible. This would include print, direct mail, and TV. The dollars requested are consistent with costs of other media campaigns conducted by NHTSA.

$.1M.—Allow additional NHTSA travel to visit crash sites and manufacturers sites to gather information necessary to support defects investigations. ODI's budget for travel is currently $26,000. This would allow ODI investigators, the ones most familiar with the problem being analyzed, to see evidence first-hand.

$9M.—Total.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION—FISCAL YEAR 2001 BUDGET OFFSET

[Dollars in thousands]

Research and analysis	Fiscal year 2001		Diff	Offset
	Request	H/S mark		
Crash Avoidance: Driver/Vehicle Performance	20,531	7,969	12,563	9,000
Total	.....	.....	.....	9,000

Research and Analysis: (9,000) The Driver/Vehicle Performance Program would be reduced in the areas of advanced crash avoidance (4,000), human factors (4,000), and enhanced driving performance research (1,000).

SEPTEMBER 11, 2000.

The Honorable AL GORE,
President of the Senate, Washington, DC.

DEAR MR. PRESIDENT: I am pleased to transmit to you for introduction and referral to the appropriate committee a proposed bill

> To amend title 49, United States Code, to require manufacturers of motor vehicles and items of motor vehicle equipment to obtain information and maintain records about potential safety defects in their foreign products that may affect the safety of vehicles and equipment in the United States, and for other purposes.

The bill includes two titles. Title I, "Motor Vehicle Safety," would amend chapter 301 of title 49, United States Code, the motor vehicle safety statute administered by the Department's National Highway Traffic Safety Administration (NHTSA). Title II, "Odometers," would amend chapter 327 of title 49, United States Code, the odometer requirements statute administered by NHTSA.

Parts of Title I and all of Title II are taken from a bill submitted by the Department for introduction on March 24, 2000. We continue to believe that these provisions will advance the cause of highway safety and commend them to your attention. The additional provisions represent a focused effort by the Department to further strengthen NHTSA as it moves aggressively to address the critical safety issues raised by the ongoing investigation of Firestone ATX, ATX II, and Wilderness AT tires. We believe that the provisions we are submitting will augment the administrative efforts the Department has been and will be taking to give NHTSA the tools it needs to expeditiously move ahead to address this issue.

This proposed legislation could affect receipts, in that it proposes increases in civil penalties for violations under the vehicle safety and odometer laws. Therefore, it is subject to the pay-as-you-go (PAYGO) requirement of the Omnibus Budget Reconciliation Act. The Office of Management and Budget estimates that the net effect of this proposal on receipts during fiscal year 2001 would be an increase of less than one million dollars.

The Office of Management and Budget advises that it has no objection, from the standpoint of the Administration's program, to the submission of this proposed legislation to Congress.

Sincerely,

RODNEY E. SLATER,
Secretary, Department of Transportation.

A BILL

To amend title 49, United States Code, to require manufacturers of motor vehicles and items of motor vehicle equipment to obtain information and maintain records about potential safety defects in their foreign products that may affect the safety of vehicles and equipment in the United States, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I—MOTOR VEHICLE SAFETY

SEC. 101. (a) Subchapter I of Chapter 301 of title 49, United States Code, is amended by inserting at the end the following new section:

"SEC. 30106. INTERNATIONAL COOPERATION.

"(a) GENERAL AUTHORITY.—The Secretary of Transportation may cooperate internationally to enhance motor vehicle and traffic safety by exchanging information related to safety defects, noncompliances with motor vehicle safety standards and regulations, and other matters related to motor vehicle safety, conducting vehicle safety research, and updating, developing and promoting improved motor vehicle safety standards and enforcement procedures.

"(b) CONFIDENTIAL INFORMATION.—The Secretary may authorize the disclosure of confidential commercial information submitted to the National Highway Traffic Safety Administration, or incorporated into agency-prepared records, to foreign government officials who perform counterpart functions to the National Highway Traffic Safety Administration as part of cooperative law enforcement or regulatory efforts, provided that:

> "(1) The foreign government agency has provided both a written statement establishing its authority to protect confidential commercial information from public disclosure and a written commitment not to disclose any information pro-

vided without the written permission of the sponsor or written confirmation by the National Highway Traffic Safety Administration that the information no longer has confidential status; and

"(2) The Secretary determines disclosure would be in the interest of motor vehicle safety.

"(c) NON-PUBLIC INFORMATION.—The Secretary may disclose nonpublic, predecisional documents concerning the National Highway Traffic Safety Administration's or the other government agency's regulations or other regulatory requirements, or other nonpublic information relevant to either agency's activities, as part of cooperative regulatory activities, provided that:

"(1) The foreign government agency has the authority to protect such nonpublic documents from public disclosure and will not disclose any documents provided without the written confirmation by the National Highway Traffic Safety Administration that the documents no longer have nonpublic status; and

"(2) The Secretary determines that the exchange is reasonably necessary to facilitate cooperative regulatory activities.

"(d) LIMIT ON DISCLOSURE.—Any exchange under this section of confidential commercial information and nonpublic documents and information does not require that such records shall be made available to all members of the public."

(b) The analysis for Chapter 301 is amended by the addition of the following after the entry for section 30105:

"30106. International Cooperation.".

SEC. 102. Section 30115 of title 49, United States Code, is amended by inserting at the end the following: "A person shall not affix a certification label or tag to a motor vehicle or item of motor vehicle equipment unless the person has performed testing or other engineering analyses that demonstrate compliance with all applicable motor vehicle safety standards prescribed under this chapter.".

SEC. 103. Sec. 30118 of title 49, United States Code, is amended as follows:

(a) In subsections (a), (b) and (c), by inserting ", original equipment" after "motor vehicle"; and

(b) In subsection (c), by designating the existing text as paragraph (1), by redesignating existing paragraphs (1) and (2) as subparagraphs (A) and (B), respectively, and by adding the following at the end:

"(2) A manufacturer shall have a duty to review and consider information regarding crashes or incidents in vehicles or equipment where there are fatalities, serious injuries, or fires, including such information received from foreign sources, to learn whether the vehicle or equipment contains a defect or does not comply with a motor vehicle safety standard, and to advise the Secretary if the manufacturer has reason to believe that a defect or noncompliance may exist.".

SEC. 104. Section 30120(g)(1) of title 49, United States Code, is amended by—

(1) striking "8 calendar years" and substituting "10 calendar years"; and

(2) striking "3 calendar years" and substituting "5 calendar years".

SEC. 105. Section 30120 of title 49, United States Code, as amended by section 104 of this Act, is amended by adding at the end the following:

"(j) LIMITATION ON SALE OR LEASE OF USED MOTOR VEHICLES.—

(1) A dealer may not sell a used motor vehicle, for purposes other than resale, or lease a used motor vehicle until the dealer informs the purchaser or lessee of any notifications of a defect or noncompliance pursuant to section 30118(b) or section 30118(c) of this title with respect to the vehicle that have not been remedied, and either

"(A) offers to have the defects or noncompliances remedied, or

"(B) gives the purchaser or lessee a written description of the defects or noncompliances, including all relevant information from any notification pursuant to subsections 30118(b) or 30118(c) of this title, and receives a written acknowledgment of the offer or description from the purchaser or lessee.

"(2) The requirements of paragraph (1) of this subsection shall apply after a period of time following issuance of notifications that the Secretary shall specify. The Secretary may extend this period with respect to particular notifications.

"(3) In this subsection, notwithstanding section 30102(a)(1) of this title,

"(A) 'dealer' means a person who sold at least 10 motor vehicles during the prior 12 months to purchasers that in good faith purchased the vehicles other than for resale; and

"(B) 'used motor vehicle' means a motor vehicle that has previously been purchased other than for resale.".

SEC. 106. Section 30120 of title 49, United States Code, as amended by section 104 and 105 of this Act, is amended by adding at the end the following new subsection:

"(k) LIMITATION ON OPERATION BY OWNERS AND LESSORS OF SCHOOL BUSES AND VEHICLES USED TO TRANSPORT PASSENGERS FOR COMPENSATION.—

"(1) Subject to paragraph (2), a person who owns or leases a school bus or a motor vehicle used to transport passengers for compensation and who receives a notice of a defect or noncompliance pursuant to section 30118(b) or section 30118(c) of this title may not operate the vehicle to which the notice applies as a school bus or for compensation until the defect or noncompliance is remedied as required by this section.

"(2) The requirements of paragraph (1) shall apply after a period of time following issuance of such notifications that the Secretary shall specify. The Secretary may extend this period with respect to particular notifications.".

SEC. 107. Section 30165(a) of title 49, United States Code, is amended——

(1) in the first sentence by—

(A) inserting "(1)" after "PENALTY.—" at the beginning of the sentence;

(B) inserting "or" after "30127," and striking "or 30166"; and

(C) striking "$1,000" and substituting "$5,000";

(2) by striking the third sentence; and

(3) by adding the following new paragraph:

"(2) A person who violates section 30166 of this title or a regulation prescribed under that section is liable to the United States Government for a civil penalty for failing or refusing to allow or perform an act required under that section or regulation. The maximum penalty under this paragraph is $5,000 per violation per day. The maximum penalty under this paragraph for a related series of daily violations is $500,000.".

SEC. 108. Section 30165 is amended by adding at the end the following:

"(e) ADMINISTRATIVE PENALTIES.—Whenever on the basis of any information available the Secretary finds that any person has violated any of the sections in (a) above or a regulation prescribed under any of those sections, the Secretary may assess a civil penalty under this subsection. The penalty amounts shall not exceed those under (a). The maximum penalty under this subsection for a related series of violations is $1,000,000.

SEC. 109. Section 30166 of title 49, United States Code, is amended by revising subsection (e) to read as follows:

"(e) RECORDS AND MAKING REPORTS.—

(1) The Secretary of Transportation reasonably may require a manufacturer of a motor vehicle or motor vehicle equipment to keep records, and a manufacturer, distributor, or dealer to make reports, to enable the Secretary to decide whether the manufacturer, distributor, or dealer has complied or is complying with this chapter or a regulation prescribed or order issued under this chapter. This subsection does not impose a recordkeeping requirement on a distributor or dealer in addition to those imposed under subsection (f) of this section and section 30117(b) of this title or a regulation prescribed or order issued under subsection (f) or section 30117(b).

"(2) The Secretary of Transportation shall by rule require a manufacturer of a motor vehicle or motor vehicle equipment to keep records and to make reports based on information it has received, upon receiving information, periodically, or in response to an order or specific requirement to make a report with regard to crashes or incidents in vehicles and equipment where there are fatalities, serious injuries or fires;

"(3) The Secretary of Transportation shall by rule require a manufacturer of a motor vehicle or motor vehicle equipment to keep records and to make reports, upon receiving information, periodically or in response to an order or specific requirement to make a report with regard to warranty or adjustment information related to actual or potential defects;

"(4) The Secretary of Transportation reasonably may require a manufacturer of a motor vehicle or motor vehicle equipment to provide to the Secretary of Transportation access to the manufacturer's communications related to defects and recalls, to the same extent and in the same manner as accessed by one or more of the manufacturer's dealers; and

"(5) The Secretary of Transportation reasonably may require a person in the business of providing automobile insurance or resolving claims under insurance policies, to keep records or to make reports, upon receiving information, periodically or in response to an order or specific requirement to make a report regarding crashes or incidents in vehicles and equipment where there are fatalities, serious injuries or fires including provision of the vehicle identification number,

insured's names and addresses and telephone numbers. This information shall be treated as confidential information by the Secretary.

SEC. 110. Section 30166 of title 49, United States Code, is amended by adding at the end the following:

"(l) DEFINITIONS.—In this section, notwithstanding section 30102 of this title,

"(1) 'dealer' means a person selling and distributing new motor vehicles or motor vehicle equipment, within or outside the United States, primarily to purchasers that in good faith purchase the vehicles or equipment other than for resale.

"(2) 'distributor' means a person primarily selling and distributing motor vehicles or motor vehicle equipment, within or outside the United States, for resale.

"(3) 'manufacturer'

"(A) means a person—

"(i) manufacturing or assembling motor vehicles or motor vehicle equipment; or

"(ii) importing motor vehicles or motor vehicle equipment for resale, and

"(B) includes

"(i) persons incorporated within or with their principal place of business in the United Sates and their direct and indirect domestic and foreign subsidiaries and affiliates,

"(ii) persons with their principal place of business in a foreign country, including their direct or indirect domestic and foreign subsidiaries and affiliates, any of which export motor vehicles or motor vehicle equipment into the United States, and

"(iii) persons with their principal place of business in a foreign country, including their direct or indirect domestic and foreign subsidiaries and affiliates, any of which manufactures or assembles motor vehicles or motor vehicle equipment in the United States.

"(4) 'owner' means an owner within or outside the United States.

"(5) 'purchaser' means a purchaser within or outside the United States.

"(6) 'person' means any manufacturer, distributor or dealer as defined above and any other person within the United States that may have information related to this chapter.".

SEC. 111. Sections 103, 108, 109, and 109 of this Act shall take effect on the date that is 180 days after the date of enactment of this Act.

TITLE II—ODOMETERS

SEC. 201. Section 32709(a)(1) of title 49, United States Code, is amended by—

(1) striking "$2,000" and substituting "$5,000"; and

(2) striking "$100,000" and substituting "$1,000,000".

SEC. 202. Section 32710(a) of title 49, United States Code, is amended by striking "$1,500" and substituting "$10,000".

Senator MIKULSKI. Mr. Chairman, I know the hour is late. Thank you. I will just conclude my questions, because I know we are going to be pursuing this.

Senator SHELBY. We are going to continue on this investigation, absolutely.

ECONOMIC IMPACTS OF RECALL

To Mr. Crigger and Ms. Petrauskus, Ms. Claybrook mentioned here that companies do an economic analysis to determine whether to make modifications in their products, and surmises that such an analysis was done, or probably done relating to the Firestone tires and Explorer vehicles.

Can you tell the subcommittee whether such analysis was actually done relating to tire failure, tire pressure, the Explorer suspension system, or any combination thereof by either of your companies or under contract for your companies, and sir, identify yourself.

Mr. WYANT. Yes, sir. I am Bob Wyant. I am vice president for corporate quality for Bridgestone/Firestone. I am not sure I understand your question.

Senator SHELBY. Let me ask it again. Ms. Claybrook when she testified, mentioned that companies do an economic analysis to determine whether to make modifications to their products, and she surmised that such an analysis was done relating to, in this case, the Firestone tires. Was it in fact done?

Mr. WYANT. In terms of a recall decision?

Senator SHELBY. I am just speaking of an economic analysis that would include a recall decision.

Mr. WYANT. In short, no.

Senator SHELBY. And if not, why not?

Mr. WYANT. In my 36 years, I am not aware of being involved in—am not involved and have never been involved in any safety related dollar analysis decision process, period.

Senator SHELBY. Well, some people would say a calculus of expected profits versus potential cost of lawsuits. Was that made in this case?

Mr. CRIGGER. Nothing like that was done.

Senator SHELBY. Ms. Petrauskus, what about Ford?

Ms. PETRAUSKUS. Absolutely none. There was no such analysis made. If I might just, maybe to correct the record a little bit, there was earlier discussion about changes made.

Senator SHELBY. Modifications.

Ms. PETRAUSKUS. Modifications made during the development process and the engineering process for the explorer. One of the things I wanted to be absolutely clear on is, before the Explorer vehicle went into production it passed not just all of the Government's requirements but our own tough, very tough rollover requirements, and it did so at 26 psi tire pressure, and it did so at 35 psi tire pressure.

I just want to be sure there was no confusion on that score. Thank you.

FORD EXPLORER SUSPENSION REDESIGN

Senator SHELBY. I have another question to direct to you. It has also been brought to our attention that during the consumer satisfaction replacement of tires in Saudi Arabia and Venezuela, that Ford instituted a redesign of the Explorer suspension. If that is true, why have you not taken similar action in the United States?

Ms. PETRAUSKUS. That is not correct. In the case of Saudi Arabia, at the same time as we replaced the customer tires we did two other things. We put in place a training program for our dealers, and we reduced the top speed of the Explorer electronically to try to see if we could keep the speed down. So we reduced the top speed to the levels that we have in the United States. They had been higher in Saudi Arabia.

Senator SHELBY. Does that lead reasonable people to infer perhaps that the tire problem is exacerbated by the vehicle and the design?

Ms. PETRAUSKUS. All of the evidence—I need to answer your question about Venezuela, too, and I will in a moment.

All of the evidence we have in Saudi Arabia almost unequivocally seems to point to underinflation—but I am not talking about a little underinflation. I am not arguing about 20 versus 26 versus 30. I am talking about underinflation in the low teens—a lot of bad repair practices, and a lot of damage, external damage to the tire, the kind you would get going over sharp rocks and the like, because there is a lot of recreational use of these vehicles in the desert, and that in part was one of the things that led us to conclude we need to reduce the maximum speed levels down to the U.S. level.

In the case of Venezuela, the decision was made to put stiffer shock absorbers on the vehicles. These are the same we have used in Australia for some time. The good thing about these Australian shock absorbers is, they are stiffer and they do a much better job in terms of giving the customer a decent ride on washboard roads. It was a complaint we had. It was a want, a customer want we had from customers in Venezuela. We went ahead and decided to put it into production. There is absolutely no relationship between those shock absorbers, or the prior version, and tread separations and tire issues we have seen in Venezuela. We are absolutely confident of that.

Senator SHELBY. And in those lawsuits that were settled where the agreements are sealed, are you saying or would you say that there is no connection to anything that might come out of those?

Ms. PETRAUSKUS. If I might, I just want to be real clear in the case of Ford Motor Company I am unaware of documents, any documents that we sealed.

Now, what we do have is, when there is a settlement agreement the fact of the settlement and the amount of the settlement is kept private, but everything else, all of the day-to-day engineering documents, all of the complaint data, all of the things that relate directly to safety, and that we have talked about making public, none of that, none of that is protected information, and the reason there have been so many documents talked about in the press is we do not ask for confidential treatment, and they are all over town.

NHTSA'S SLOWNESS IN RESPONDING

Senator SHELBY. Dr. Bailey, I will try to be quick with this. Representatives from State Farm Insurance, which insures, as I understand, about 20 percent of drivers in the United States, informed your agency's office of defects investigations of a growing number of incidents of tire failure by the P–35, 75, R–15 Firestone, ATX tire mounted on 1991 to 1995 Ford Explorers in July of 1998.

NHTSA, however, did not act on this information until May 2000, or reportedly on subsequent phone conversations from State Farm to NHTSA. Why were these communications, these warnings, if you will, from State Farm seemingly ignored?

Dr. BAILEY. They were not ignored. When they were received they were analyzed in relationship to the population of tires that were produced, which was over 40 million at that time.

Those 21 complaints, those claims that were "noticed", and that is a quote from the original e-mail, that were "noticed", those claims ran over a period of almost 8 years, several years. So you can see over several years 21 complaints in a population of 40 million tires, it did not trigger an investigation, nor would it have.

Senator SHELBY. Let me follow up with this. If you are claiming or stating that those complaints perhaps were not enough to trigger an investigation, why did it open an investigation of model year 1991, 1993 Chrysler minivans after receiving, Dr. Bailey, only two complaints that seatbelts would open when in use, and did not this investigation lead to a recall of 1.1 million vehicles?

In other words, you acted on one thing at a smaller threshold and at a larger threshold, probably a lot more danger, perhaps, you did not act at all.

Dr. BAILEY. Let me again put it in perspective and say that we take in about 50,000 complaints a year. There are about 500 that deal with tires. There are only about 50 that deal with Firestone tires. There were only about five a year that dealt with these particular tires.

And so that we have it in context here, you can see that again when we are looking at a population of 47 million tires produced with less than 5 complaints a year about these specific tires in question, that would not necessarily trigger an investigation, again where there may be 500 complaints a year about other tires.

Let me also say, the difference between the Chrysler situation and the Firestone situation, is that we never expect a seatbelt or a child safety seat to fail. Therefore, one or two or three failures of something that is never supposed to fail is enough to trigger an investigation, whereas we know that tires that may be used for 40,000 miles, do fail. So we are putting it into the context of the difference between tires and safety mechanisms that are not ever intended to fail.

Senator SHELBY. To Ford and Bridgestone/Firestone, it has been mentioned here that, well, there is going to be a request by the committee for the documents, the internal documents related to Firestone and Ford and the safety and the warnings and everything. Will we have to subpoena those, and if so we will, or will you furnish those to the committee?

Mr. CRIGGER. We will cooperate fully with the committee.

Ms. PETRAUSKUS. We will be happy to provide whatever documentation the committee will require.

Senator SHELBY. Okay. I want to thank all of you for your testimony and your participation here. We will continue our investigation.

SUBCOMMITTEE RECESS

Thank you. The subcommittee is recessed.

[Whereupon, at 12:55 p.m., Wednesday, September 13, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

TUESDAY, SEPTEMBER 12, 2000

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:33 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Richard C. Shelby (chairman) presiding.

Present: Senators Shelby and Specter.

OVERSIGHT HEARING ON FREIGHT RAIL COMPETITION ISSUES

NONDEPARTMENTAL WITNESSES

STATEMENT OF ROBERT T. CROWE, VICE PRESIDENT, WALTER INDUSTRIES, INC., BIRMINGHAM, AL

OPENING STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. The committee will come to order. This oversight hearing of the Transportation Appropriations Subcommittee will now begin.

American railroads carry more freight than ever. According to the Association of American Railroads, 26 million carloads of freight were carried in 1998; however, the number of major U.S. railroads has declined dramatically over the last two decades, and this high volume of freight traffic is concentrated on a more streamlined rail system that is experiencing capacity constraints, as we all know.

Over the past couple of years I have had a number of meetings with rail-dependent companies, who consider themselves captive to one major railroad. They have no choice in who provides their rail service. These captive shippers, as they are called, feel that the level of service they are provided and the shipping rates they are charged reflect that lack of competition.

Some companies can point to specific examples of how lack of competition is affecting their and their customers' bottom line. A chemical company in the Gulf Coast region of Texas cites the ridiculous instance of paying the exact same rate to ship their product by water to a market in the Far East, almost 7,000 miles away, as they paid to ship by rail to Atlanta, less than 1,500 miles away. Their contract with the shipping company stipulates delivery with-

in 2 days of the targeted delivery date. The rail contract to Atlanta has a 4-day delivery window there.

A company might be willing to pay higher rates if they could be confident that their product would arrive at the destination within the time period specified in the service contract. Sadly, this is often not the case. Many companies have experienced severe service problems in the wake of recent mergers. In Alabama, my home State, two chemical companies reported to me that slow rail service in the wake of the Union Pacific/Southern Pacific merger led to a near shutdown of a major Alabama production plant, and did, in fact, shut down a production unit of specialty chemicals in McIntosh, Alabama, due to rail service failures.

Shippers have very few realistic forms of redress for poor performance. A company can appeal unreasonable rates or lack of competitive access before the Surface Transportation Board, if they can afford it. FMC Corporation, a diversified industrial conglomerate headquartered in Chicago, filed an appeal against a Class I railroad, based on unreasonable rates, and after 2½ years the STB ruled in FMC's favor. However, the legal costs of the drawn-out appeals process and the expense of economic modeling required by the STB cost the company $6 million to file the appeal, more than the company might ever recover in awards.

I have called this hearing today to explore the issues of freight rail access, rail service, and shipping rates. I want to focus on whether there is sufficient level of competition and choice in the rail shipping and railroad industry. I know that some of today's witnesses will definitely answer no, we need more choice and better competitive options.

Farmers, small businesses, and their customers deserve good service and fair pricing, just as much as large companies do. Competition drives investment, increases capacity, reduces shipping rates, and fuels economic growth. I want to talk about ways that railroads, the shipping community, and the regulatory agency that oversees them, the Surface Transportation Board, can enhance and stimulate competition.

If railroads are unwilling to provide that service at a reasonable charge, I think that we should try to find ways to allow others to compete for that market. Small railroads and shippers help build and maintain communities. We know that. They are vital to the economies of American farms, small communities, and towns. Limited access, slow or erratic service, and non-competitive shipping rates discourage these smaller businesses, and can have real consequences on local economies. Railroads need to be more service oriented and more competitive.

I am looking forward to our day's witnesses here, and look forward to hearing them all. Our first panel will be the shippers. We will have Mr. Bobby Tom Crowe, Walter Industries, Birmingham; Mr. Eric Aasmundstad, representing the American Farm Bureau and the farmers of North Dakota; and Ms. Diane Duff, from the Alliance for Rail Competition. I want to welcome all of you here today. Mr. Crowe, do you want to start?

STATEMENT OF ROBERT T. CROWE

Mr. CROWE. Thank you, Mr. Chairman. My name is Bobby Tom Crowe. I am here representing the American Chemistry Council and the Alabama Chemical Manufacturers, and uniquely, Walter Industries is made up of a group of subsidiary corporations of manufacturers that stretch all across the United States. We also happen to own and operate a very active short-line railroad.

COMPETITIVE RAIL SERVICE

Mr. Chairman, I certainly commend this hearing and the committee encouraging the industry to come forward, and to comment, regard, and support competitive rail service in the United States.

As you know, the American Chemistry Council is the voice of U.S. chemical industry. The American Chemistry Council represents the chemical industry on public policy issues, coordinates the industry's research and testing programs, administers the industry's environmental, health, safety, performance improvement initiative that is known as the Responsible Care program.

I commend you for holding these hearings to encourage competition. Changes in the rail industry, marked by the series of noncompetitive mergers, demand an examination of the current policy. It was the stated intent of the Staggers Act of 1980 to encourage competition among railroads. Rail competitiveness legislation must include several important revisions to balance the interest of rail customers with those of rail carriers and rail labor.

I am not here to bash or demagogue these issues. We all have a common goal, efficient, reliable, and reasonable-priced rail transportation, and encouraging competition between railroads is the way to achieve that goal. We need a responsive rail industry, not one that exploits major portions of its customer base, and deals very harshly with competitive shippers.

The Council's member companies compete on a national and global basis. Sixty-three percent of our manufacturing facilities are captive to a single railroad. This makes it difficult for us to reduce costs and get our products to market on a consistent and reliable basis. A better balance in the existing regulatory system is clearly needed.

Rail customers, therefore, recommend that six provisions be included in any rail competitive legislation: Clarify the rail transportation policy by requiring the STB to give greater weight to the need for increased competition; two, require all rail carriers to quote a rate between any two points where traffic originates, terminates, or may be reasonably interchanged without regard to whether the rate is for only part of the total movement; three, eliminate the requirement that evidence of anti-competitive abuse be produced in a request to the STB for competition in a terminal area; four, provide low-volume, captive, and all agricultural-related customers with the simple benchmark test for rate and service cases; five, codify the STB's decision to exclude evidence of product or geographic competition when determining market dominance; and six, abolish requirement that the STB determine revenue adequacy.

While each of these provisions is discussed fully in my written statement, I will now address three of these most important areas of concern.

BOTTLENECKS

Congress should require rail carriers to quote a rate between any two points where traffic originates, terminates, or may reasonably be interchanged. The STB has ruled that in most situations a railroad with such a bottleneck monopoly can foreclose competitive routing by other railroads. The STB will not even hear a challenge to the reasonableness of a rate for a bottleneck segment.

We believe that a carrier that controls a bottleneck should not be allowed to exploit its monopoly position. Instead, its pricing should be subject to the current statutory restrictions against charging unreasonable high rates where there is no effective competition.

Consistent with other deregulatory precedents, Congress should overturn the bottleneck decision. We are not asking you to dictate the rate, but if Congress lets the bottleneck decision stand, competition simply will not exist for most captive rail shippers.

COMPETITION IN TERMINAL AREAS

Congress should eliminate the requirement that a customer must prove anti-competitive abuse to obtain access to another railroad in an area served by more than one carrier. The Staggers Act allows such competition in a terminal area by means of either terminal switching, trackage rights, or reciprocal switching. The law has been interpreted to mean that a customer must establish anti-competitive abuse, so railroads are effectively protected against competition. We ask Congress to remove the anti-competitive abuse test that has been superimposed on the current statute.

MARKET DOMINANCE

Congress should codify the STB's decision to exclude evidence of product or geographic competition from the agency's market dominance determination. Market dominance is the threshold test for determining the agency's authority to hear rate cases. By law, market dominance means an absence of effective competition from other rail carriers or modes of transportation. There is no market dominance if a railroad proves that the rate is less than 180 percent of so-called variable costs of the movement.

For many years, however, the STB required a rail customer prove that it did not have the ability to use other product competition or access a similar product from another geographical region. This made what was originally intended to be only a threshold test into a lengthy, complicated, and overburdensome process.

In December 1998, as a result of rule-making proceedings, the STB determined that product and geographic competition should be removed as factors in the market dominance determinations. We are grateful that the STB heeded the complaints of the rail customers about its market dominance rules. We request that Congress simply codify the STB's recent decisions.

Mr. Chairman, members of the committee, and committee staff, some describe our six provisions as re-regulation. To the contrary, we do not want more regulation. We want cooperation, and to enforce the intent of the Staggers Act, but we do believe that the pro-competitive intent of that Act has been undermined and with protectionist decisions. We urge you to remove the barriers to competition and to adjust policies that are no longer appropriate in a consolidated rail industry. Then we will see a stronger rail industry that will be able to respond to customers.

Congress should also look into the concerns of rail labor, short-line railroads, and regional railroads when crafting rail competitiveness legislation. We look forward to working with you to accomplish this goal. We, again, do not need more regulation, but more cooperation. Historically, shippers have had to come to Congress to deal with railroads. We do not consider that as a request for greater regulation.

PREPARED STATEMENT

Thank you, Mr. Chairman, for providing this opportunity.

Senator SHELBY. Yes, sir.

[The statement follows:]

PREPARED STATEMENT OF ROBERT T. CROWE

EXECUTIVE SUMMARY

This testimony is on behalf of the American Chemistry Council. The American Chemistry Council is the voice of the U.S. Chemical Industry. The American Chemistry Council represents the chemical industry on public policy issues, coordinates the industry's research and testing programs, and administers the industry's environmental, health, and safety performance improvement initiative, known as Responsible Care®.

The testimony provides a brief summary of why rail customers engaged in the business of chemistry are concerned about rail transportation. It then reviews the need for changes in the existing law and provides specific recommendations for what those changes ought to be.

Below is a summary of the six provisions that we as rail customers support in legislation to revamp the rail industry:

1. *Policy*.—Clarify the rail transportation policy of the U.S. by requiring the Surface Transportation Board (STB) to give greater weight to the need for increased competition between and among rail carriers.

2. *Bottlenecks*.—Require rail carriers to quote a rate between any two points on the system where traffic originates, terminates or may reasonably be interchanged without regard to whether the rate is for only part of the total movement.

3. *Competition in Terminal Areas*.—Eliminate the requirement that evidence of anti-competitive conduct be produced when the STB determines outcome of requests to allow another railroad access to rail customer facilities within an area served by the tracks of more than one railroad.

4. *Relief for Certain Agricultural Shippers*.—Provide small, captive agricultural shippers with a simple benchmark test for rate and service cases.

5. *Market Dominance*.—Codify the STB's decision to exclude evidence of product or geographic competition when determining market dominance.

6. *Revenue Adequacy*.—Abolish the requirement that the Board determine on a regular basis which railroads are revenue-adequate.

Good afternoon Mister Chairman and members of the subcommittee. I am Bobby Tom Crowe. I am here today representing the American Chemistry Council. Our concern is the need for better rail transportation.

You are to be commended for holding this hearing. Congress needs to become more active in the debate about rail transportation.

The rail transportation debate has been described by some as "re-regulating" the rail industry. I must strongly state that nobody supports returning to rail regulation as it existed prior to the enactment of the Staggers Act of 1980. Customers of the rail industry need a strong and economically viable railroad system. Without such

a system, the country's economy will suffer and we would not be able to receive raw materials and market our products.

At the same time, we need a rail industry that is responsive to the needs of its customers. My company, as well as the other members of the American Chemistry Council, competes on a national and international basis. The competition we face on a daily basis means not only that we must seek ways to reduce costs, but we must also seek transportation options that get our products to market on a timely basis. There are occasions when shipments must reach a rail destination by a specified time to be loaded on an ocean-going ship or to be used by a customer on a time-sensitive basis. If these shipments are late we can lose sales or face other business consequences. These are the reasons that rail transportation must be provided on a basis that is responsive to the demands of the customer. It is for these reasons that a better balance in the existing regulatory system is needed.

In the United States, the business of chemistry employs some 1,000,000 high-tech, high-wage workers. In turn, these lead to the creation of 1.1 million jobs in other industries, bringing total U.S. jobs dependant on the chemical industry to 2.1 million. Our industry is the U.S. leading export sector and a substantial contributor to a positive U.S. balance of payments. The chemical industry depends heavily on railroads to safely and efficiently transport raw materials to chemical manufacturing facilities and to deliver a wide variety of finished products to destinations throughout the country. Railroads also transport chemical exports to Canada, Mexico, and U.S. ports.

According to data compiled by the Association of American Railroads, the chemical industry ships about 140 million tons of products by rail on an annual basis and spends about $5 billion per year on rail freight charges, accounting for 15 percent of the revenue received by U.S. railroads. Most significant in terms of competitiveness, 63 percent of chemical manufacturing facilities are served by a single railroad. These monopolized facilities face high transportation costs and often suffer from inadequate rail service.

Recent rail transportation events have shaped the business environment. There is a growing awareness that transportation is not a separate, isolated function of the supply chain, but rather, an integral part of the production process. When talking about the transportation you must remember few other issues address such fundamental business components in corporate America. That is, rail transportation is about: Moving raw materials and products; Meeting customer demand; and Affecting the corporate bottom line.

Why are the railroads the only industry in this country to exercise monopoly control over their customers? The core issue is the lack of competition in the U.S. rail system. Legislation is needed to address the fundamental way railroads operate.

BACKGROUND FOR CHANGE

Four developments over the last twenty years have reduced the competitive transportation alternatives for many "captive" shippers.

Railroad Mergers and Consolidations

First, the railroad industry has consolidated from approximately 40 major railroads in 1980 to six major railroads today. There are two railroads in the west: the Burlington Northern Santa Fe and the Union Pacific; two in the east: the Norfolk Southern and the CSX; and two operating in the middle of the nation and in parts of the northeast: the Kansas City Southern and the combined Illinois Central/Canadian National. In their decisions approving railroad mergers, the STB and its predecessor, the Interstate Commerce Commission (ICC), have attempted to maintain for all shippers at least as many transportation options as they had prior to the merger, sometimes using trackage rights and other such agreements to achieve these results. But the Board's efforts have not always been successful.

"Tie In" Agreements with Shortline and Regional Carriers

Second, there has been a proliferation of short line and regional railroads since 1980 as the major railroads sold off parts of their systems. However, as the major railroads sold tracks to new short line and regional railroads, the sales agreements often included provisions requiring the short line to move its freight back to the railroad that sold the track, even where movement to a second railroad might be possible. These provisions were approved by the ICC and the STB and further protected by an agreement between the major railroads and the short line and regional railroads, which itself has been approved by the STB. Thus, competition that could have been created by when tracks were sold has instead been stifled. It is of interest, however, than in testimony before the STB in March, the American Shortline

and Regional Railroad Association advocated greater competition due to the higher level of consolidation that now prevails in the rail industry.

Lack of Competition in Terminal Areas

Third, in the mid-1980's the ICC adopted an interpretation of the Interstate Commerce Act that allows the railroads to prevent competition from occurring in terminal areas. Terminal areas are those places where the facilities of at least two rail carriers cross and therefore competitive alternatives could be available to rail customers if they were able to be served by more than one railroad. Under its interpretation in the 1986 *Midtec* case, the ICC determined that railroads could avoid competition in a terminal area unless a shipper or other railroad proves "anti-competitive abuse" by the railroad. No applicant seeking competition in a terminal area has ever been able to satisfy the STB's interpretation of "anti-competitive abuse". This "anti-competitive abuse" test is not contained in the Interstate Commerce Act as amended by the Staggers Act.

The Bottleneck Decision

Finally, and perhaps of most concern to railroad customers, is the STB's "bottleneck" decision, which is fundamental to the entire issue of competition in the rail industry. On February 10, 1999, the United States Court of Appeals for the Eighth Circuit, in *MidAmerican Energy Co.* v. *Surface Transportation Board*, upheld the December, 1996 decision of the STB that allows railroads to "exploit" their bottlenecks. The question of "bottlenecks" is now a public policy issue ripe for resolution by Congress.

That judicial decision in the bottleneck case is that under current law railroads can avoid competition and "exploit" their customers located on railroad bottlenecks. Under this decision, the railroads have been given the best of both worlds: the benefits of deregulation and the ability to "exploit" their monopoly facilities! This state of the law must be reversed by an act of Congress.

By way of background, "bottlenecks" are those sections of a transportation movement where only one railroad is available. Typically, for much of the remainder of the movement, competitive rail transportation options are available. "Bottlenecks" are a problem where one of the two railroads that could provide competition also controls the "bottleneck". Where the "bottleneck" carrier can provide service at the "origination" of the movement and at the "destination" of the movement, then the "bottleneck" carrier has every economic incentive to exclude the other railroad from participation in a part of the overall movement. Thus, the "bottleneck" railroad either will not provide a rate across only the "bottleneck" portion (thus preventing the customer access to the railroad competition that is available) or will quote a rate for its portion of the movement that is so high as to make the joint-line portion economically infeasible.

In December, 1996, the STB sided with the railroads in its "bottleneck" decision, succumbing to their unsubstantiated claims that they would fall into financial ruin if they could not "exploit" their customers across their bottleneck facilities. Captive rail shippers are outraged by this decision. If this decision stands, the railroad industry will be the only "network" industry that has been both deregulated, but allowed to continue to "exploit" its "essential facilities". This privilege was not extended to the airline industry, the telecommunications industry, the natural gas pipeline industry or the electric utility industry. In each of these cases, either Congress or the Federal regulatory agency has required these industries to allow competitive rates across their "bottleneck" facilities. Railroad customers demand to know why a different decision was made in the case of the railroads, why their interests have been dismissed and what standard is going to restrain the railroads "exploitation" of those over whom the railroads continue to enjoy monopoly power.

Railroad customers encourage Congress to adopt legislation overturning the "bottleneck" decision and requiring the railroad at least to quote a rate to customers across bottleneck facilities. Railroad customers are not even asking the Congress to dictate the rate, as has been in the case with respect to the telecommunications, pipeline and utility industries. If Congress lets this "bottleneck" decision stand, transportation competition simply will not exist for most captive rail shippers of bulk commodities.

In light of these four developments, most shippers of bulk commodities do not have access to transportation competition. The choice of these railroad customers is either to keep quiet and accept the transportation terms dictated to them by the railroads or to test the reasonableness of their rate at the STB. Unfortunately, as shown in a 1999 GAO study, the "rate reasonableness process" at the STB is so difficult, costly, time consuming and cumbersome that few railroad customers ever pur-

sue this remedy. This remedy, by the way, is the only rate relief remedy available to captive rail shippers.

On other matters, STB Chairman Linda Morgan indicated in a letter to Senator John McCain and Senator Kay Bailey Hutchinson, that the agency needs direction from Congress. That letter, dated December 21, 1998, identified a number of areas in which Congress should provide more direction. These requests for direction include: rail competition, revenue adequacy, and so-called "small" rate cases.

Unfortunately, the STB has chosen to ignore many of the policy mandates listed in Staggers. For example, the following are listed as rail policy in Staggers:

1. Rail policy should foster sound economic conditions and to ensure effective competition and coordination between rail carriers and other modes;

2. Rail policy should reduce regulatory barriers to entry into and exit from the industry; and

3. Rail policy should prohibit predatory pricing and practices, to avoid undue concentrations of market power, and to prohibit unlawful discrimination.

These policies need to be clarified legislatively and not with any new regulation of the industry. The Staggers Act provides the STB with policy to ensure a competitive, free-market environment for both large and smaller rail customers. It is time the policy is put into practice.

RECOMMENDATIONS

In light of the above, the American Chemistry Council supports rail competitiveness legislation that includes the six provisions summarized here:

1. *Policy*.—Clarify the rail transportation policy of the U.S. by requiring the Surface Transportation Board to give greater weight to the need for increased competition between and among rail carriers.

2. *Bottlenecks*.—Require rail carriers to quote a rate, upon request, between any two points on the system where traffic originates, terminates or may reasonably be interchanged without regard to whether the rate is for only part of the total movement.

3. *Competition in Terminal Areas*.—Eliminate the requirement that evidence of anti-competitive conduct be produced when the STB determines outcome of requests to allow another railroad access to rail customer facilities within an area served by the tracks of more than one railroad.

4. *Relief for Certain Agricultural Shippers*.—Provide small, captive agricultural shippers with a simple benchmark test for rate and service cases.

5. *Market Dominance*.—Codify the STB's decision to exclude evidence of product or geographic competition when determining market dominance.

6. *Revenue Adequacy*.—Abolish the requirement that the Board determine on a regular basis which railroads are revenue-adequate.

Each of these provisions is discussed in more detail below.

1. *Policy*.—Congress should clarify the U.S. rail transportation policy by requiring the STB to give greater weight to the need for increased competition between and among rail carriers.

The current rail transportation policy appears to clearly favor competition as the primary regulator of choice. Currently, the statute appropriately states that, among other factors, it is Federal policy:

—to allow, to the maximum extent possible, competition and the demand for services to establish reasonable rates for transportation by rail;

—to minimize the need for Federal regulatory control and to require fair and expeditious regulatory decisions when regulation is required;

—to promote a safe and efficient rail transportation system by allowing rail carriers to earn adequate revenues as determined by the Board;

—to ensure development of sound rail transportation system with effective competition among rail carriers and with other modes, to meet the needs of the public and the national defense;

—to foster sound economic conditions and to ensure effective competition and coordination between rail carriers and other modes;

—to maintain reasonable rates where there is an absence of effective competition;

—to reduce regulatory barriers to entry into and exit from the industry;

—to prohibit predatory pricing and practices, to avoid undue concentrations of market power, and to prohibit unlawful discrimination; and,

—to provide for the expeditious handling and resolution of all proceedings required or permitted to be brought under this part.

However, a review of the past 20 years of regulatory precedent demonstrates that rail regulators have given disproportionate emphasis to the provision that states that the STB is to allow rail carriers to earn adequate revenues. If Congress truly

intended for competition to be the regulator of choice—among rail carriers as well as with other modes—the priorities of this policy need to be clarified legislatively.

2. *Bottlenecks*.—Congress should require rail carriers, upon request, to quote a rate between any two points on the system where traffic originates, terminates or may reasonably be interchanged without regard to whether the rate is for only part of the total movement.

In the agency's 1996 "bottleneck" decision, the STB ruled that, in most situations, a rail carrier with a "bottleneck" monopoly can lawfully foreclose alternate and competitive rail routings by another carrier, where the "bottleneck" carrier can provide origin to destination service. Consider the example of a shipper that needs to move his goods 1,000 miles and is served by both Carrier A and Carrier B at his destination, but only Carrier A at his origin. Carrier B interchanges with Carrier A and can provide alternative and competitive rail service over 900 miles of the total movement from the interchange to the destination.

In the above example, even though Carrier B can provide competition over a large portion of the movement, the STB ruled that Carrier A can simply refuse to interchange with Carrier B for transportation from the interchange to the destination. The STB also ruled that it would not even consider a shipper's challenge to the lawfulness of a rate for this "bottleneck" segment. This means that there can be no review of the reasonableness of a rate for the 100 miles controlled by Carrier A in the above example.

The STB's bottleneck decision should be reversed legislatively, to restore to shippers the right to route over competitive routings at rates produced by the competitive market thorough existing interchanges, and to clarify that the STB can establish a maximum reasonable rate over a bottleneck segment. These changes would ensure that the monopoly bottleneck carrier couldn't take advantage of its pricing power to foreclose competition over the competitive portion of the route. They would permit competition to flourish where it can. These changes would not bring a return to the old "open routing" system, whereby carriers were required to keep even inefficient interchanges open and were required to charge the same rate over all possible routes. Rather, only interchanges already utilized by the carriers would qualify, and rates over various routes would vary as costs and competition demand. Where a carrier controls a bottleneck, its pricing initiative would only be subject to current statutory restrictions against charging unreasonably high rates where there is no effective competition.

Consistent with other congressional deregulatory precedent, railroad customers encourage Congress to adopt legislation overturning the "bottleneck" decision and requiring the railroad at least to quote a rate to customers across bottleneck facilities. Railroad customers are not asking Congress to dictate the rate, as has been in the case with respect to the telecommunication, pipeline and utility industries. If Congress lets this "bottleneck" decision stand, transportation competition simply will not exist for most captive rail shippers.

3. *Competition in Terminal Areas*.—Congress should eliminate the requirement that evidence of anti-competitive conduct be produced when the STB determines outcome of requests to allow another railroad access to rail customer facilities within an area served by the tracks of more than one railroad.

The 1980 Staggers Rail Act specifically allowed competition to occur within terminal areas by means of either "terminal trackage rights" or "reciprocal switching," but regulatory interpretation of the law has prevented this from occurring.

According to 49 USC § 11102. "Use of Terminal Facilities," the law clearly states that the Board may require terminal facilities—including mainline tracks for a reasonable distance outside a terminal—to be used by another rail carrier if it is "practicable" and "in the public interest" so long as it does not "substantially" impair the owner of those facilities to handle its own business. This is referred to as "trackage rights."

This section of the law also clearly states that the Board may require rail carriers in a terminal facility to transfer, or "switch," a customer's shipment to another rail carrier—under what is known as "reciprocal switching agreements,"—where such agreements are found to be "practicable and in the public interest," or "where such agreements are necessary to provide competitive rail service."

Railroads already can access each other's customers through either trackage rights or reciprocal switching agreements, and often do. However, the railroads decide unilaterally which customers within the reasonable distance of the terminal area can access such competition, and the competing railroads usually will only agree to an "even swap" of access to specific customers. As a result, most customers that fall within a "reasonable distance" or rail terminal facilities can not get competition through these provisions unless the regulator deems such action to be "practicable and in the public interest" or "necessary to provide competitive rail

service"—a function that was originally envisioned and anticipated within the 1980 Act as a means to encourage competition.

Unfortunately, regulators have interpreted the language of the statute to mean that a rail customer must prove that the railroad was undertaking anti-competitive abuse. Rather than affirming the pro-competitive intent of the law, the regulator has determined that trackage rights and reciprocal switching agreements will only be used when anti-competitive behavior can be proven to exist. Although this provision of the law was clearly intended as a means of encouraging an emergence of competition, instead the STB chose to protect the rail industry from competition. Therefore, rail customers are asking Congress to remove the "anti-competitive abuse test" that was superimposed on the current statute by regulators.

4. *Relief for Certain Agricultural Shippers*.—Provide low volume, captive agricultural shippers with a simple benchmark test for rate and service cases.

In the case of the low-volume agricultural shipper, a better test must be established to provide these customers with a quick and simple way to access relief from poor service and unreasonably high rates within the existing regulatory framework. The existing "small rate cases" provision does not work because it does not provide any clear indication of who would qualify, or establish a definitive simple rate or service benchmark.

Consider: STB's guidelines established three factors that the Board will look at to determine the maximum rate for small shippers. Specifically, the Board reviews the profits that the carrier obtains from the challenged rate compared to: (1) The profits that railroads in general earn from comparable traffic; (2) The level of profits that the carrier would need to obtain from all of its potentially captive traffic in order to become "revenue adequate"; and (3) The profits that the defendant carrier earns on all of its potentially captive traffic. But the Board has never said how these comparison factors will be weighted or if they will even be utilized, so from a legal standpoint, a small shipper has no means of assessing the potential outcome of bringing a rate complaint.

In addition, there has never been a decision by the Board about what case would qualify as a "small case" so a shipper with a complaint doesn't even know who can qualify to use these rules. One of the three comparison factors depends upon access to the confidential waybill sample data, and you can't get access to the data until you file a complaint. Beyond the complexities of the STB's guidelines, the process is lengthy and costly. The prospect of spending thousands of dollars—or even millions, and weeks—or even years—of time on a process that is unlikely to provide any real relief is not especially enticing, particularly in a fast paced marketplace where other business opportunities could be lost.

In STB Chairman Morgan's letter of December 21, 1998, she specifically noted that, if Congress agrees with the assessment that the current guidelines could unreasonably impede access to the regulatory process and should be replaced by a single benchmark test, Congress could adopt specific "small" rate case standards.

Various members of the agricultural community have proposed a threshold under which it would be clear what rate and service circumstances would merit regulatory relief. This proposal would also establish the parameters for such relief, and in circumstances where all else fails, allow eligible facilities to sue for damages either in Federal court or before the STB.

5. *Market Dominance*.—Codify the STB's decision to exclude evidence of product or geographic competition when determining market dominance.

According to the statute, "market dominance" means an absence of effective competition from other rail carriers or modes of transportation. In theory, a finding of "market dominance" gives the STB the authority to protect a captive shipper—one who has no alternative transportation choices—from excessively high rates. By law, if a rail carrier proves that the rate charged is less than 180 percent of out-of-pocket costs, then that carrier is determined to be not market dominant. Market dominance was intended by Congress to be merely a threshold test for determining the agency's authority in hearing rate cases.

However, in implementing this part of the statute, regulators required a rail customer to prove that it did not have the ability to use another product ("product competition") or access a similar product from another geographic region ("geographic competition"). The addition of determining product and geographic competition as part of market dominance made what was originally intended to be only a threshold test into a lengthy, complicated and overly burdensome process.

On December 21, 1998, as a result of a rulemaking proceeding, the STB determined that factors of product and geographic competition should be removed from the market dominance determinations. This provision would simply codify this decision.

Captive rail shippers are very grateful that the STB heeded the complaints of railroad customers and removed the consideration of "product" and "geographic" competition from the "market dominance" test. This provision would simply codify the STB's December 21, 1998 decision.

6. *Revenue Adequacy*.—Abolish the requirement that the Board determine on a regular basis which railroads are revenue adequate.

According to the STB, the revenue adequacy status of any particular railroad has little practical effect, and Congress may wish to consider legislatively abolishing the requirement that the Board determine on a regular basis which railroads are revenue adequate.

According to many financial analysts on Wall Street, the revenue adequacy status of any particular railroad is never even considered when determining the financial status of that railroad.

Finally, according to Dr. Alfred Kahn, the noted economist widely known as the "father of deregulation" for his work in deregulating the airline and trucking industries, the revenue adequacy test as currently applied by the Surface Transportation Board is nonsensical and should be abolished.

In short, the annual regulatory determination of revenue adequacy has little if any bearing on the realities of railroad economics unnecessarily polarizes the transportation community, and should be eliminated.

CONCLUSION

The chemical industry believes that any rail competitiveness legislation must include these provisions. These provisions do not "re-regulate" the rail industry; in fact, in most cases, they remove agency-imposed barriers to competition or adjust regulatory policies that are no longer appropriate in a consolidated industry. If these provisions are enacted, rail customers believe that we will see the growth of an inherently stronger rail industry that is responsive to customer needs and concerns. We look forward to working with you to accomplish just that.

STATEMENT OF ERIC AASMUNDSTAD, NORTH DAKOTA FARM BUREAU STATE PRESIDENT, AMERICAN FARM BUREAU FEDERATION

Senator SHELBY. Mr. Aasmundstad, go ahead.

Mr. AASMUNDSTAD. Good afternoon, Chairman Shelby. My name is Eric Aasmundstad. I am the President of the North Dakota Farm Bureau, and in addition to my duties as President of the North Dakota Farm Bureau, I am also a grain producer and custom harvest operator in North Central North Dakota. I am appearing here today representing the American Farm Bureau Federation, the nation's largest general farm organization.

NORTH DAKOTA LANDLOCKED

The area where I live in North Dakota is landlocked, and we are 100 percent dependent on over-land transport to the ports. The farmers there have every reason to be concerned about competitive transportation. It is impossible for the relatively small number of Americans who farm to feed the remaining majority of Americans who do not, in the absence of a viable transportation system.

Environmental advocates insist that we cannot expand and modernize the waterway transportation infrastructure in the upper Mississippi, which is so crucial to my area. Some of these same environmental advocates insist that the Corps of Engineers implement a so-called spring rise on the Missouri that will end commercial navigation on the Missouri, including export grain, and endanger commercial navigation on the main stem of the Mississippi. Still, other environmental advocates insist that the Corps of Engineers destroy the waterway navigation infrastructure that is critical to the competitiveness of grain producers in the Northwest.

Ironically, those who seek to end waterway navigation insist the freight can be moved on trucks and by rail when these alternative

modes are clearly unable to handle the additional freight. Add to this safety advocates who insist that highway safety must be served by reducing the number of hours a farmer can drive to deliver his grain to ever more distant river terminals and rail-loading facilities, coupled with the fact that our rural highways and bridges continue to deteriorate and Class I railroads continue to abandon rural rail lines. All these things considered together put a very, very heavy burden on the agricultural sector.

COMPETITION

Competition is important for all agricultural shippers. As a general rule, agricultural shippers are unable to command the market power to deal with a railroad company as effectively as a major coal mining company or electric utility.

We are often forced to deal with poor service, such as trains that are not delivered to a loading point in a timely manner, and it may not be picked up for days or weeks. Farmers and agricultural shippers must also absorb extremely high freight rates that railroad companies can demand due to their monopoly market power.

The real-world experience of American farmers demonstrates that competition would be helpful. Prior to the massive rail consolidation of the last 20 years, many agricultural areas were served by three or four railroads that could move grain and other bulk commodities. Today, only two railroads carry the vast bulk of the traffic that moves west of the Mississippi River, and in many areas, they do not compete with each other. Grain producers from western States pay very high freight rates to ship their grain.

STAGGERS ACT

Over the years, the ICC and the STB, which succeeded it, determined that the powers granted by the Staggers Act set that a shipping rate of 160 percent of a railroad's variable costs as full return for the railroad's cost to capital. Further, the Staggers Act determined the railroad rates greater than 180 percent of variable costs are excessive.

In a fact-finding proceeding conducted recently by the STB, the North Dakota Public Service Commission, the North Dakota Wheat Commission, and the North Dakota Grain Dealers Association submitted shipping cost figures to the STB in March 1998 regarding shipping rates from North Dakota to Portland, Oregon. According to that submission, shipping rates averaged from 229 percent to 257 percent of variable costs, using rate figures from the fourth quarter of 1995.

According to a quick survey of grain shippers in my state, BNSF now charges about $1.20 per bushel to ship Hard Red Spring Wheat to Seattle. If you compare this per-bushel shipping price to the market being offered in my State of $2.27 a bushel, you can see that farmers in my State are working several months a year to pay BNSF to ship their product.

Every penny in shipping costs that result from a lack of meaningful competition is born by farmers in the form of lower grain prices at the elevator where they sell their grain. We believe meaningfull competition among rail service providers would help alleviate this problem.

I have spent a great deal of time here discussing the price, because the numbers are available that can help describe the problem. Service difficulties are more difficult to quantify and assign numbers to. Overtime costs elevator operators must incur when a railroad drops off cars late, and insists on picking them up loaded the next day, missing connection points with customers, and trains sometimes lost for days in shipping yards all have costs that are born by shippers, and ultimately by the farmers.

PAPER AND STEEL BARRIERS

Since many rural areas find themselves served by short-line or regional railroads, it is critically important for reforms to discourage paper and steel barriers. Paper barriers may prevent a short line or regional railroad from interchanging with any Class I other than the one that sold the track that now forms the short line's infrastructure as a condition of that sale.

These contractual barriers can take other forms as well. Steel barriers are more simple. Sometimes the class one that sold the short line or regional railroad's track simply removes any spurs or branches that would allow the smaller railroad to interchange with any other class one. Congress should prohibit such barriers to competition and instruct the STB to carry out that mandate. There are key reforms needed to ensure meaningful rail competition.

Competition is of paramount importance. Farm Bureau supports provisions of the Rail Competition and Service Improvement Act that requires incumbent railroads to offer access to competing railroads in terminal areas and allow shippers to seek rates from a competitor over so-called bottleneck rail segments. Many agricultural shippers find themselves captive to a single rail service provider.

PREPARED STATEMENT

One of the things our members, the folks I represent in North Dakota, feel that—one of the questions that have to be answered, should railroads be considered strictly a for-profit entity, owned and controlled by their stockholders, or should they be thought to provide an essential service, much as electric companies? That is the question we feel needs to be answered.

[The statement follows:]

PREPARED STATEMENT OF ERIC AASMUNDSTAD

Chairman Shelby and Members of the Subcommittee, I am Eric Aasmundstad, President of the North Dakota Farm Bureau. In addition to my duties as North Dakota Farm Bureau president, I am a grain producer and custom combine operator in north central North Dakota. I am appearing today representing the American Farm Bureau Federation, the nation's largest general farm organization, with nearly five million Farm Bureau families across the country.

Farmers have every reason to be concerned about competitive transportation. It is impossible for the relatively small number of Americans who farm to feed the remaining majority of Americans who do not, in the absence of a viable transportation system. Washington has failed to create competitive transportation options by reforming the outdated Jones Act, which effectively prohibits coastwise ocean transportation of agricultural products and allows operators of a small and inefficient U.S. flag fleet to maintain a monopoly on such transportation. Environmental advocates insist that we cannot expand and modernize the waterway transportation infrastructure on the Upper Mississippi. Some of these same environmental advocates insist that the Corps of Engineers implement a so-called spring rise on the Missouri

River that will end commercial navigation on the Missouri (including carrying export grain) and endanger commercial navigation on the mainstem of the Mississippi. Still other environmental advocates insist that the Corps of Engineers destroy the waterway navigation infrastructure that is critical to the competitiveness of grain producers in the Northwest.

Since 1997, the Dakota, Minnesota and Eastern (DM&E) Railroad has worked to improve and expand its lines, allowing it to move coal from the Powder River basin in Wyoming to its Mississippi River terminal in Minnesota. This will also allow DM&E to offer improved service to its agricultural shippers. According to USDA testimony on this matter, Surface Transportation Board (STB) Finance Docket No. 33407, Dakota, Minnesota & Eastern Railroad Corporation Construction Into the Powder River Basin, 11/30/98:

"DM&E's shippers cannot compete effectively for (Pacific Northwest) traffic because the railroad is too slow—it takes 9 days to move across DM&E from end-to-end. Rebuilding the railroad will promise to cut this travel time from days to hours. In addition, connecting to the Iowa & Minnesota Rail Link near Owatonna, Minnesota, will allow DM&E-sourced corn to move to the processing plants of Iowa. With the ability ship to three major markets (river, processors, and Pacific Northwest), the basis price for agricultural producers should rise: some estimates suggest increases as high as $.20 per bushel for both corn and wheat. If prices for wheat, corn and soybeans increased just $.10 per bushel, then farm income in the DM&E service region could increase by more than $90 million in a typical crop year."

Mr. Chairman, with a strong endorsement like that, you might think the necessary regulatory approvals to rebuild and expand the DM&E would already be in hand, and heavy equipment would be humming in South Dakota and Minnesota. Unfortunately, that is not the case. Three years after beginning their regulatory efforts, DM&E and its investors are still awaiting an environmental impact statement (EIS) from the Surface Transportation Board that is long overdue and is estimated to run to some 3,000 pages. This draft EIS will incorporate input from five different Federal agencies, including the Coast Guard. I didn't know the Coast Guard had anyone in South Dakota to notice what might be going on there, let alone pay attention to rail construction. In the meantime, the project is in danger of running out of money and out of time, and agricultural shippers in South Dakota and Minnesota are in danger of losing yet another transportation option.

Rural highways and bridges continue to deteriorate as Class I railroads continue to abandon rural rail lines. Ironically, those who seek to end waterway navigation insist the freight can be moved on trucks and by rail, when these alternative modes are clearly unable to handle the additional freight. Add to all this safety advocates who insist that highway safety must be served by reducing the number of hours a farmer can drive to deliver grain to ever-more distant river terminals and rail loading facilities.

Farm Bureau supports greater intermodal and intramodal competition and public policies that encourage competition. The AFBF Board of Directors approved priority issues for 2000 at its meeting in January. Among these priorities are: "Promote public policies that support a low-cost national transportation system to ensure international competitiveness of U.S. farm production." A key aspect of accomplishing this broad goal is to seek public policies that create the largest possible number of competitive transportation options for agricultural shippers. Unfortunately, the public policy trend seems to be moving in the opposite direction.

Competition is important for small agricultural shippers. As a general rule, agricultural shippers are unable to command the market power to deal with a railroad company as effectively as a major coal mining company or electrical utility. We are often forced to deal with poor service, such as trains that are not delivered to the loading point in a timely manner or that may not be picked up for days or weeks. Farmers and agricultural shippers must also absorb extremely high freight rates that railroad companies can demand due to their monopoly market power.

We believe that the railroad landscape prior to the passage of the Staggers Act allowed for the possibility of competition. The Staggers Act brought about partial deregulation of the railroad industry and encouraged rail industry consolidation on a massive scale. AFBF policy approved by the delegates to the 81st AFBF Convention in January 2000 says, in part, "We oppose parallel mergers of rail systems and the granting of railroad abandonments which tend to lessen potential transportation competition."

Most of the important mergers that have occurred over the last 15 years, including that which created the Burlington Northern Santa Fe, have reduced competitive shipping opportunities for many agricultural shippers. Farm Bureau opposed the 1996 merger in which the Union Pacific absorbed the Southern Pacific because of

concerns about competitive shipping opportunities for agricultural shippers. In each instance with these past mergers, shippers have been promised benefits that largely have yet to materialize. We are pleased that the Surface Transportation Board is undertaking a review of its rules for consideration of future rail mergers to determine if changes are needed. In this Board proceeding, Ex Parte 582, it is important that the Board create clear and unambiguous rules to ensure that competitive rail service options are preserved for shippers in all future mergers. Farm Bureau has provided the Board with preliminary comments in that rulemaking, and we look forward to continuing to participate in that process. For the information of the subcommittee, the pre-rulemaking Ex Parte 582 comment of the Farm Bureau is attached to my statement. But, as I will discuss later, we are concerned that Board action to encourage competition will be insufficient to guarantee competition. We believe passage of Farm Bureau-supported legislation like S. 621, the Railroad Competition and Service Improvement Act of 1999, will be necessary.

The real-world experience of American farmers demonstrates that competition would be helpful. Prior to massive rail consolidation of the last 20 years, many agricultural areas were served by three or four railroads that could move grains and other bulk commodities. Today, only two railroads carry the vast bulk of the traffic that moves west of the Mississippi River, and in many areas they do not compete with each other. Grain producers in western states pay very high rates to ship their grain. Over the years, the Interstate Commerce Commission—and the Surface Transportation Board that succeeded it—determined with the powers granted by the Staggers Act that a shipping rate of 160 percent of a railroad's variable costs (labor, transportation, fuel, etc.) is full return of the railroad's cost of capital. Further, the Staggers Act determined that railroad rates greater than 180 percent of variable cost are excessive.

In a fact-finding proceeding conducted recently by the STB, known as Ex Parte 575, the North Dakota Public Service Commission, the North Dakota Wheat Commission and the North Dakota Grain Dealers Association submitted shipping cost figures to the STB in March 1998 regarding shipping rates from North Dakota to Portland. According to that submission, shipping rates averaged from 229 percent to 257 percent of variable cost, using rate figures from the fourth quarter of 1995.

But rather than concentrate on economic theory like percentages of variable cost, one can look at prices to move rail cars from certain locations to major grain ports in the Pacific Northwest to learn the true cost of the lack of rail competition for farmers. Earlier this year, Burlington Northern charged $3,792 to move a hopper car in a 52-car train carrying 3,260 bushels of grain from Plentywood, Montana 1,207 miles to Portland, Oregon. That is about $1.13 per bushel for rail transportation cost. From Alliance, Nebraska, to Portland, Oregon, (1,473 miles) Burlington Northern charges $3,325, or about $.99 per bushel. Thus, we have the odd situation that Nebraska farmers shipping from Alliance pay less per bushel to move their grain farther than their Montana counterparts shipping from Plentywood. Why should Montana farmers pay $.14 per bushel more to ship their grain more than 200 fewer miles than Nebraska farmers do? In this case, Nebraska farmers benefit to a limited degree from competition between railroads. Farm Bureau believes that all farmers, including those in Montana, should enjoy the benefit of competition, and Nebraska farmers should enjoy even greater benefits of competition than they enjoy now.

According to a quick survey of grain shippers in my state, BNSF now charges about $1.20 per bushel to ship Hard Red Spring Wheat to Seattle. If you compare this per-bushel shipping price to the market being offered in my state ($2.27 a bushel for wheat per Grainline.com on August 10), you can see that farmers in my state are working several months a year to pay BNSF to haul their grain to market. Every penny in shipping cost that results from a lack of meaningful competition is borne by farmers in the form of lower grain prices at the elevators where they sell their grain. We believe meaningful competition among rail service providers would help alleviate this problem.

I spend a great deal of time here discussing price because numbers are available that can help describe the problem. Service difficulties are more difficult to quantify and assign numbers to. Overtime costs elevator operators must incur when a railroad drops off cars late and insist on picking them up loaded the next day, missing connection points with customers, and trains sometimes lost for days in switching yards all have costs that are borne by shippers and ultimately by farmers.

There are key reforms needed to ensure meaningful rail competition. Competition is of paramount importance. Farm Bureau supports provisions of the Rail Competition and Service Improvement Act that requires incumbent railroads to offer access to competing railroads in terminal areas, and to allow shippers to seek rates from

a competitor over so-called "bottleneck" rail segments, where many agricultural shippers find themselves captive to a single rail service provider.

Since many rural areas find themselves served by shortline or regional railroads, it is critically important for reforms to discourage "paper" and "steel" barriers. "Paper" barriers may prevent a shortline or regional railroad from interchanging with any Class I other than the one that sold the track that now forms the shortline's infrastructure as a condition of that sale. These contractual barriers can take other forms as well. "Steel" barriers are more simple: sometimes the Class I that sold the shortline or regional railroad its track simply removes any spurs or branches that would allow that smaller railroad to interchange with any other Class I. Congress should prohibit such barriers to competition and instruct the Surface Transportation Board to carry out that mandate.

Thank you for your time and attention. I'd be happy to answer any questions you may have.

Senator SHELBY. Thank you. Ms. Duff, do you mind if Senator Burns—if you will defer to him. I wanted to ask you, though——

Senator BURNS. Yes. You better ask her—you do not want to get——

Senator SHELBY. I think you-all are on the same song book here——

Senator BURNS. Yes.

Senator SHELBY. The same page.

Senator BURNS. Mr. Chairman, thank you very much——

Senator SHELBY. Senator Burns, thank you.

Senator BURNS [continuing]. For inviting me here today. I will just submit my statement. I did want to——

Senator SHELBY. It is in the record, without objection.

Senator BURNS [continuing]. Sort of reinforce what Mr. Aasmundstad, down there, said.

STATEMENT OF SENATOR CONRAD BURNS

Senator BURNS. Keep in mind that we are talking about great distances in the West when we start working, when we start moving stuff, whether we are moving coal, or we are moving services or equipment into our State, because agriculture, we sell wholesale, we buy retail, and we pay the freight both ways. Right now, that freight is taking one big bite, especially in States where we are captive shipper. North Dakota has the same problem we did.

Now, I will tell you a little story about Wesby, Montana. Wesby, Montana used to be in North Dakota years ago, but they moved over into Montana, because of a freight weight situation. Now, we are thinking about moving it back, because you get the cheaper rates from North Dakota to Portland than we do in Montana. We can ship to North Dakota, and North Dakota can change engines and send it right back through the State, back to Portland, and we come out a little bit better. That is the way it was working for quite a while.

So we have legislation pending, and it has quite a lot of support around the country, and, of course, I do not think there is a chance that we get it done this year, but next year I think we will, and we need to pursue it for the simple reason that even though the railroads or the majors will tell you that rates have come down nationally, but in States where we are captive shippers, just the opposite is true.

About 3 years ago we got into a situation that has hurt agriculture more than anything else. We had a merger in the South-

west, and we had a virtual meltdown in Houston. We had cars tied up, and we had grain on the ground that never was shipped, that was never moved, and you combine that with the complete collapse, the financial collapse of five countries in the Pacific rim that take the majority of our production in the Northwest, and you combine those two, and we have never been able to recover from those situations. Some of that was caused by just the lack of service and the attitude towards service, and also our freight rates.

So I am going to submit my statement for the record today. I appreciate you having these hearings. There is concern, because the mergers in the railroads are not over. They are not over.

There are some pending out there, even though the Burlington Northern Sante Fe with the Canadian National, that is sort of on the back burner right now, I doubt if it will happen, but it is not for sure that there are not more mergers out there in the offing.

So I appreciate you having these hearings, and I appreciate the courtesy. Thank you, Ms. Duff, for doing that, and I would submit my statement for the record.

PREPARED STATEMENT

Senator SHELBY. The statement will be made a part of the record without objection.

[The statement follows:]

PREPARED STATEMENT OF SENATOR CONRAD BURNS

Thank you Mr. Chairman, I appreciate the opportunity to testify before your Subcommittee. The issue of rail competition is one I have been very active on over the last decade.

As you know, Congress passed the Staggers Act in 1980. At the time of enactment, there were over 40 major railroads. Today, we have only 4 major railroads. Within 20 years, rail competition in our nation was decimated. Today you will hear testimony that our nation's rail transportation environment is as healthy as ever. You will hear testimony that rail rates have decreased significantly under deregulation as provided by the Staggers Act.

What you won't hear from the rail industry is the growing numbers of markets that are becoming captive to railroads. Corporate consolidation has had severe implications for Montana's farmers and ranchers. The rail industry is no different. Montana is almost entirely captive to a single railroad.

What does that mean? Considering the cost and level of service provided in Montana, this means our farmers pay more that any other shipper in the nation for less than adequate service. Montana farmers are forced to wait until the railroads are ready to provide service while these same railroads rush to provide service to those areas where a competitive element exists. Meanwhile, Montana grain fills our elevators, and once full, the grain sits on the ground exposed to the elements until rail transportation is available.

Once that service is available, Montana farmers pay extremely high rates, higher than any other rate in the nation for this service. Mr. Chairman, the bottom line is that Montanans pay more for less. Now this is just one scenario—granted an extreme scenario—from one region of our nation.

Our nation's railroad transportation environment is not stable in its current state. Nationally, our rates have decreased since passage of the Staggers Act. However, regionally, farmers and other shippers raise concerns about inadequate service or forced high costs due to a lack of competitive presence. I expect this to evolve further.

Industry stability is absent. We can determine this not only by the recent merger attempt but also by the impact this announcement had on the entire industry. Immediately following the announcement by the Burlington Northern Santa Fe and Canadian National railroads, I was made aware of several other merger discussions. Alliance building within the railroad and airline economies in the face of competitor merger proposals is a fascinating process.

Also, we can consider the instability of the rail industry by the impact on rail service following the 1995 merger of the Union Pacific and the Southern Pacific. The Houston meltdown in 1998 had service impacts across the nation. Montana farmers were hit especially hard in a time of financial crisis that remains in existence today.

Through all of this, the Surface Transportation Board contends we have a very healthy rail industry. Given this inability to see the forest through the trees, I am particularly concerned about the STB's effectiveness as the adjudicating body between railroads and shippers.

Montana's grain producers as well as other small businesses have been facing tough transportation issues for nearly two decades. Montana is a classic case of what happens to shippers when you eliminate competitive transportation alternatives. Our rail rates go through the roof and our shippers end up subsidizing rail rates in regions where we do have competition.

Now, we're seeing the same thing happen in other regions around the nation. Montana has been down this road and I encourage members of this Committee to look at the problems we face in Montana as a precursor to what will happen in other regions.

The STB, based on their 1998 decision regarding the *McCarty Farms* vs. *Burlington Northern* case, has indicated to the producer that BNSF's rates are not excessive. I am concerned that after 17 years of adjudication, by using the STBs decision making process, those decisions may not be the right decisions.

Montana rail rates are the among the highest in the country. These rates significantly exceed 180 percent of variable cost, and the only way the STB can justify the rates as reasonable is to subscribe to the 'differential' pricing scheme of the railroads. Make no mistake about this scheme, it is 'discriminatory' pricing and it is only practiced by monopolies. It is unfair on its face and Congress needs to consider legislation such as S. 621 introduced by myself, along with Sens. Rockefeller, Dorgan and Roberts, that will help to introduce competition into this market like it has done with other monopolized markets such as telephone, electric utility, and pipeline transportation.

Montana's shippers pay some of the highest rates in the world while our neighbors pay a significantly lower cost for transportation. The price of regulatory freedom for monopolies, should not be borne by captive shippers.

The rail industry is unique. Other industries whether that be the airlines, utilities, or telephone companies have their own problems. But rail transportation is based solely on trackage rights. Competition is quickly becoming an unknown in rail transportation.

In Montana, we are truly dependent on the railroads to transport bulk commodities that could not be efficiently transported by any other means. Economic history can tell us what happens in an environment without competition. The free enterprise system is not based upon allowing monopolies to control markets. The provider rakes in the profits but the shipper continues to pay the cost in increased rates and a decrease in the quality of service.

Today's witness representing the railroads will suggest that Montana's rates are the result of an open and deregulated environment. If the problem is strictly based on market dominance, how can Montana's shippers have the highest freight costs in the nation. If ever there has been a victim of free-market economics, Montana's producers top that list.

It is apparent that the failure of the Surface Transportation Board to take proper action against the nation's rail industry has led to a problem of much larger scope—this is not just Montana's problem anymore—it is now a national problem. Therefore, it is important that Congress take action now to enforce the rights of our nation's producers and preserve the idea of competition while there remains an opportunity to preserve competition.

Agricultural shippers are the most vulnerable to predatory marketing by monopolistic practices of railroads. They are charged the freight rates by the grain merchandisers when they deliver their grain to market, but they don't pay the railroads, the merchandisers do. The most important point is that the farm producer unlike every other industry we know of in America, cannot pass the freight costs on to anyone else, they must simply eat it.

We do not need to re-regulate the railroads; rather we need to restore the balance between shippers and railroads that Congress intended to achieve originally in the Staggers Rail Act of 1980. I look forward to working with my colleagues to restore the competitive balance in the rail transportation industry and level the playing field for shippers.

Thank you, Mr. Chairman.

Senator SHELBY. Ms. Duff, thank you for deferring to the Senator, but he wanted to make sure that was your choice.

Ms. DUFF. Well, it was my pleasure to defer to the Senator.

Senator BURNS. We have been working together on a lot of this stuff.

Senator SHELBY. We have.

Senator BURNS. It was a pleasure.

Senator SHELBY. Before Senator Burns leaves, our staff has just reminded me, I just want to point out that he is a member of the Commerce Committee, a very active chairman of the subcommittee there. He knows a lot about these issues, you could tell.

It is my understanding, Senator Burns, that you are the co-sponsor of a rail reauthorization bill that addresses many of the service, rate, and access issues that we have been talking about today, is that correct?

Senator BURNS. Right. S–621.

Senator SHELBY. Where is that bill now?

Senator BURNS. Well, it is still in committee.

Senator SHELBY. It is still in committee.

Senator BURNS. I will try and convince the chairman.

Senator SHELBY. Okay. Thank you.

Senator BURNS. Okay.

STATEMENT OF DIANE DUFF, EXECUTIVE VICE PRESIDENT, ALLIANCE FOR RAIL COMPETITION

Senator SHELBY. Ms. Duff, your full statement will be made part of the record, without objection. You may proceed, as you wish. Thank you again for deferring to Senator Burns.

Ms. DUFF. Absolutely. Thank you very much, Senator Shelby, for focusing your attentions on the rail competition debate.

I am here today representing the Alliance for Rail Competition, which is a broad coalition of rail customers, including agriculture, coal and utilities, chemicals, and petro-chemicals, forest and paper products, steel, and other manufacturing industries that rely on rail transportation.

RAIL OVERSIGHT SYSTEM

As far as these rail customer constituencies are concerned, the rail oversight system is broken. Government regulators have spent too much time over the past 20 years trying to apply their views of what is fair, and not enough on accomplishing the mandate of deregulation, which would systematically replace government regulation with competitive choice as the most effective and unbiased arbiter.

Railroads may face some intermodal competition in some markets, but head-to-head competition among railroads has been virtually eliminated by 20 years of protectionist regulatory decisions, and dozens of mergers, all sanctioned by rail regulators.

This current state of affairs means that a large chunk of rail customers who have no modal alternatives are paying exorbitantly high rates for some of the worst service that the railroads have to offer. Furthermore, captive rail customers are rightfully fearful of the potential of railroad retaliation if they pursue either regulatory

or political intervention, so much so, that many refuse to enter into this debate at all.

RETALIATION TACTICS

Railroads have often employed subtle and not-so-subtle retaliation tactics to quiet customer complaints. In fact, railroads have such complete market control over these groups of customers that they can apply such rates or limit service in such ways as to put rail customers out of business, or at least, at further extreme disadvantage.

Railroads will tell you that today's policies benefit the public, because there is no other way to earn the revenues necessary to sustain their high fixed costs, low-return businesses. This is simply not true. Many, many industries with similar cost structures function quite successfully in highly competitive environments. They have figured out how to differentially price their services according to customer demands, rather than monopoly control.

The key is being willing to listen to your customers, providing the various tiers of services that will meet their needs, and pricing those services accordingly. For railroads to do this, they need to apply innovative solutions to their rampant service problems. Competition has regularly provided the necessary incentive for other former monopoly industries to do the exact same thing.

Unfortunately, the Federal agency put in place to prevent this kind of behavior has been somewhat of a paper tiger. I have no doubt that the members of the board believe that they are exercising the board's legal authority consistent with the will of Congress. After all, to date, neither of the authorizing committee chairman in either the House or the Senate have been particularly sympathetic to calls for competition among railroads.

Furthermore, I must give this board due credit for the things that it has done; for example, the market dominance decision that they promulgated in 1998 expedited service relief procedures, and, in fact, undertaking the current merger policy review that is under way. However, rail customers do not want to have a regulator determine what is fair, and they cannot afford the 2-year or more process that it takes. They want to be able to negotiate in a free market, where they have a choice, and the STB has done nothing to foster that kind of competitive choice among railroads.

In the next couple of weeks, the board will release its proposed merger policy rules, and then we will see whether the board will finally apply clear, specific guidelines for how to increase competition among railroads through its broad merger authority. No matter what the board does, however, Congress must determine the role of competition among railroads for the future.

Addressing concerns of customer choice via mergers can only do so much, and the board has repeatedly made it clear that it is not going to independently change current system-wide policies that limit competition within the existing industry framework.

BOARD GUIDELINES

Thus, I urge this committee to keep a close eye on the board's activities in the coming months. If the board does not provide clear guidelines for how it will exercise the broadest portion of its au-

thority to promote competition among railroads, then I suggest that this committee ought to consider the relative value of this agency, and provide annual funding for it accordingly. The rail customer community will keep you informed of our views on this process, while continuing our efforts to promote comprehensive rail policy reform.

I should add, also, that the Alliance for Rail Competition has consistently supported the provisions that Mr. Crowe outlined in his testimony earlier, but as we continue to look down the road at what the rail industry has made very clear is going to happen, and that is further mergers, resulting in likely a two-railroad monopoly system throughout North America, we need to really look very hard at what those provisions do in that sort of an environment and really question whether it is enough, and we will be doing that in the coming months.

PREPARED STATEMENT

Thank you again for having this hearing, and I appreciate the opportunity to testify.

Senator SHELBY. Thank you, Ms. Duff.

[The statement follows:]

PREPARED STATEMENT OF DIANE C. DUFF

Mr. Chairman and members of the subcommittee, thank you for holding this hearing today. Your time and attention are greatly appreciated by the rail customer community, which wants very much to work with this committee and others to bring responsible free market competition to the freight rail industry, and to put an end to rail monopoly control.

My name is Diane Duff, and I serve as the Executive Director of the Alliance for Rail Competition, also known as ARC. ARC is a membership organization dedicated to promoting rail-to-rail competition through legislative changes to rail policy. ARC's membership consists of corporate and other organizations representing the agriculture, coal and utilities, chemicals, petrochemicals, plastics, forest and paper, steel and other manufacturing industries. ARC also collaborates with the many trade associations and professional organizations that represent these industries. My testimony will attempt to succinctly cover a broad range of the elements involved in the debate regarding rail competition, including some of the policy recommendations supported by the rail customer community. Furthermore, I will make some suggestions to this committee regarding how to assess the performance of the Surface Transportation Board in future appropriations cycles.

I. THE RAILROAD INDUSTRY POST-DEREGULATION

The members of the Alliance for Rail Competition view rail deregulation—embodied in the Staggers Rail Act of 1980—as having had many beneficial effects. Deregulation freed the railroad industry from artificial regulatory constraints that had been financially devastating, and the removal of these restraints has led to improved productivity and increased profitability.

However, the monopoly characteristics that we see in today's rail industry certainly cannot be what Congress envisioned when the Staggers Rail Act was passed. Although rail deregulation provided railroads with financial assistance, the real purpose of deregulation was to allow competition to prevail—that is, true competition in an effective efficient and timely manner without creating interim monopoly power and bottlenecks.

Unfortunately, monopoly power and bottlenecks are the primary characteristics of today's rail industry. Since deregulation in 1980, the number of major Class I railroads has declined from approximately 42 to only four major railroads today. These four mega-railroads overwhelmingly dominate railroad traffic, generating 95 percent of the gross ton-miles and 94 percent of the revenues, controlling 90 percent of all U.S. coal movement; 70 percent of all grain movement and 88 percent of all originated chemical movement. This drastic level of consolidation has left rail customers

with only two major carriers operating in the East and two in the West, and has far exceeded the industry's need to minimize unit operating costs.

Railroads frequently claim that consolidation has not reduced rail customers' ability to gain access to more than one railroad, or even harmed those customers who have always been captive to one railroad, since those rail customers never had access to more than one carrier prior to these many mergers. However, the potential alternatives those captive shippers once had have been essentially eliminated because, in most cases, the captive rail customer's entire route or routes are now controlled by a single carrier. This highlights how little has been done by regulators to "maximize competition to the greatest extent possible," as directed by existing statute.

Rates.—When it comes to discussing rate levels and whether or not they are fair, it all depends on how dependent you are on the railroad for transportation. Those rail users that have some options—such as the proximity of a second railroad or another mode of transportation altogether—are the ones who have the competitive benefits intended by of deregulation.

However, there remains a significant portion of the rail customer community that has no choice. For example: it is virtually impossible to move millions of tons of coal by truck; transporting bulk quantities of grains by truck over hundreds of miles is not economically feasible; and safety concerns limit the movement of many chemicals to rail. Of course, not all coal, chemical and grain traffic is captive—some companies moving these commodities are located in proximity to two railroads, or are close enough to a waterway to make barge transportation viable. But many, many companies that move these kinds of bulk commodities and cannot access more than one railroad are held hostage to railroad monopoly power. In general, we know that these captive rail customers are paying rates that are anywhere from 30 to 50 percent higher than the rates of their competitors that have some competitive transportation alternative. Under this scenario, rail transportation becomes one of the biggest—if not the biggest—cost associated with moving these low-value bulk commodities. As a result, these captive rail customers are put at a significant disadvantage in their own markets, and in a sense, a railroad can determine the economic success or failure these customers.

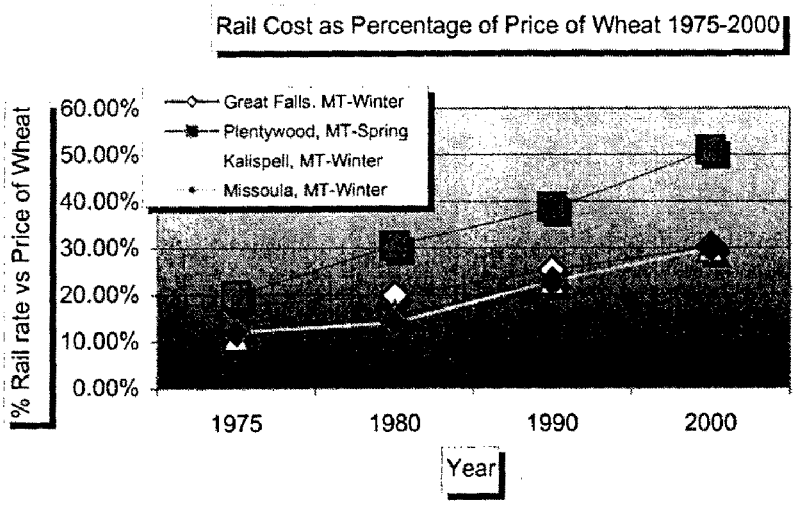
The Association of American Railroads asserts that rail freight rates have declined by more than 50 percent in constant dollars since 1980. However, I urge you to look behind the graphs and understand what these numbers really represent. The AAR data does not measure freight rates as the price paid to ship some quantity of the commodity in question. Instead, the railroads use a complex average of various statistics known as "revenue per ton-mile," a measure that is not comparable to the rates actually paid for rail transport. In fact, AAR's own data contradicts the use of revenue per ton-mile as a rate surrogate. Comparing revenue per ton-mile to the AAR Freight Rate Index shows that revenue per ton-mile overstates the decline in rates by more than 300 percent. Additionally, Commerce Department data shows that this discrepancy between rates and revenue per ton-mile continues today.

Furthermore, the revenue per ton-mile measurement has been falling steadily since at least 1935, regardless of the regulatory climate. This happens because revenue per ton-mile is driven by a complex set of factors, such as length of haul, commodity mix and shipment size which can, in combination, produce reductions in revenue per ton-mile even when the freight rate structure is otherwise unchanged, or even increases. Thus, much of the decline in revenue per ton-mile is a mathematical illusion. Railroad traffic has undergone dramatic structural changes, particularly in the past 20 years. First, unit trains—that have lower costs and revenues per ton-mile than other trains—are more widely used. Second, there has been significant growth in long-haul corridors that have lower costs and revenues than short distance movements. Third, more and more costs have been transferred to the rail customer in the form of cars and equipment, loading and unloading facilities, and other similar costs. In addition, the consequences of growing the "cheaper" varieties of freight—i.e. those low-value bulk commodities that have no real transportation alternatives—are that average revenue per ton-mile has declined, irrespective of changes in rates. The ploy of masking structural changes in the rail industry by employing revenue per ton-mile as a surrogate for rates creates the false illusion of rapidly decreasing freight charges.

Consider rates from another perspective. The U.S. Bureau of Labor Statistics Railroad Producer Price Index reveals that rail prices, as defined by the amount

customers pay for rail services, increased 48 percent from 1980 to 1996 whereas the AAR Revenue per ton-mile (RTM) statistic indicates a decrease of 18 percent.[1]

Another way to see what's really happening with rates is to compare the rise of rail rates to the price of the commodity being transported. For example, when one looks at the rail rates versus the price of wheat shipped from Montana between 1975 and 2000, the rail price has risen from less than 20 percent of the price of wheat when there was limited rail-to-rail competition in the state to over 50 percent in 2000 when the BNSF today, has a total monopoly on rail movements from the state.



Captive rail customers' concerns about rail rates center on the inability of entire industries and/or regions that are captive to continue to compete in the world economy. If a railroad monopoly exists between the producer and the end-user of the commodity, the monopoly railroad has the ability and the will to exact, through its tariffs, all of the profit gained by efficiency and productivity. U.S. producers face competition all over the world for their products against many foreign competitors who do not face a monopoly railroad situation.

The U.S. General Accounting Office (1999) conducted a recent general survey of rail customers, yielding some telling results. They found that 81 percent of shippers want increased transportation competition and 75 percent believed that they were being charged unreasonable rates.

Service.—While rates are a serious concern for many shippers, of at least equal, if not greater, concern is the deteriorating quality of service that shippers—particularly captive shippers—receive. Massive amounts of testimony about service problems resulting from both the UP/SP service crisis in the West and the ongoing service problems associated with the division of Conrail between CSX and Norfolk Southern. Railroad service failures have cost the national economy billions of dollars. However, given the broad diversity of the rail customer community—and each customers' respective and differing service needs—it is very difficult to quantitatively portray the railroads' service performance in any meaningful way.

Railroads present performance measurements based on train speeds, the amount of time a train sits in a terminal area, and so forth, but again, the specific needs of any given rail customer make these averages somewhat irrelevant unless you're interested in the fluidity of the entire system. If I'm making regular movements of unit coal trains to a facility, my estimation of rail performance is likely to be consistency: are the unit trains arriving and departing on a stable and reliable schedule that allows me to maintain my coal stockpile at the optimum level? However, if I'm moving multiple car shipments of chemicals to various locations where my customers require those materials by a certain time, my rail service needs are likely to be quite different. Alternatively, if the price of wheat is favorable and I need to

[1] R.L. Banks and Associates Inc. and Fieldston Company, Inc. (1998) "Rail Freight Rates in the Post-Staggers Era". Report prepared for the Alliance for Rail Competition, available on-line at http://www.railcompetition.org

move my wheat harvest to the West Coast for export, will the railroads provide the cars and locomotive power necessary to deliver that shipment to the port quickly enough so I can capture that price?

In short, railroad performance can really only be truly measured one customer at a time, and thus, anecdotal stories from customers who are captive to rail transportation become quite informative. For example, a Chicago-area agricultural processor purchasing $30 million worth of rail services annually was quoted last year as saying, "If I could figure out a way to conduct our business without using railroads, I would absolutely without any hesitation stop doing business with them." Another rail customer was quoted, "There isn't one [railroad] today that is easy or convenient or just competent enough to warrant doing business with." With the consolidation of the railroad companies, he continued, "it is getting worse. As they get bigger we become relatively less important to them."[2]

The railroads have frequently blamed current rail customer complaints on the transitions that naturally take place after mergers. In truth, however, rail customers have been concerned about deteriorating service for years. Railroads have paid less and less attention to customer service, further demonstrated by the fact many of them have virtually eliminated their customer service departments over the last five years.

The bottom line is that, from the rail customer's perspective, the level of rates and the quality of service are directly linked to the shipper's ability to access competition. In other words, those rail customers that are the most captive pay the highest freight rates and get the worst service. Where there is competition, rates go down and the quality of service goes up; and when competition is absent, the opposite also is true.

In summary.—By most standards, the pro-competitive goals of rail deregulation have not been met. Competition among rail carriers is virtually nonexistent, and as a result, not a single North American railroad is meeting the current supply chain standards required by most American industry—nor is there any reasonable prospect of remarkable improvement. Certainly, some of the few remaining major railroads perform better than others. But after five or more years of constant service failures by one railroad or another, the perpetuation of distorted freight rates, and a continued emphasis on further consolidation rather than service, operational innovations and improvements, it is clear that railroad policy changes are needed.

II. THE ROLE OF REGULATORS

Unfortunately, the STB hasn't, up to now, felt that the rail customer's pain warranted encouraging competition to provide fairness in the marketplace for the constituency it is mandated to protect. Despite clear statutory language directing regulators to encourage competition to the maximum extent possible, regulators seem to have an overly narrow view of their responsibility to protect existing or encourage new competition among railroads. In all fairness, this narrow protectionist approach was not something that the Surface Transportation Board dreamed up when it was created in 1995. And furthermore, the STB has recently made some decisions that improve regulatory processes. Still consider the following damage that has already occurred over the past five years.

—The STB has approved mergers that have placed 94 percent of the entire U.S. rail transportation market in the hands of just four carriers, and those four carriers don't even compete with each other over significant portions of their respective territories. It's worth noting that the Department of Justice vehemently opposed the UP/SP merger, which the Board has often identified as having significant competitive benefits. Although the Board has imposed some conditions to mitigate the loss of the barest levels of competition, those conditions have been applicable only in limited areas, and have not attempted to improve competitive factors, or extend competitive access to those rail users that have historically been captive to one railroad. Since the Board's merger authority is so far-reaching, it seems that the Board could have taken a more aggressive approach to encouraging competition in previous merger transactions.

—The STB, and its predecessor, have consistently condoned the act of Class I carriers creating "paper barriers" when spinning off a branch line to form a shortline railroad. A paper barrier essentially prohibits the newly created "independent" shortline from interchanging traffic with any railroad but the parent carrier. As a result of paper barriers, the shortline and regional railroad community can also be captive to Class I carriers.

[2] "Getting Worse," Traffic World, Clayton Boyce, Editor. October 4, 1999.

—The STB determined that railroads are fully within their right to exploit customers located on a bottleneck. A "bottleneck" is a segment of rail track that serves either the point of origin or the point of destination in any given route. Because the bottleneck is controlled by one railroad, that railroad can force any customer that needs to move goods over that portion of track to use only that railroad's services over the entire route, regardless of whether a second carrier may be available to provide competing service for a majority of that route.

Certainly, the Board should be given credit for its modest attempts to enhance competition, such as its 1998 decision to eliminate product and geographic competition factors from the market dominance determination process. But why shouldn't its efforts have been more aggressive? And as the agency charged with regulatory oversight of the rail industry, why has the Board not requested additional authority to rectify what has clearly become an anti-competitive environment? Some rail customers have suggested that the Board has been overly influenced by the railroad industry.

This brings us to the Board's ongoing Ex Parte proceeding intended to revise its merger policy procedures. There may be some differing views within the rail customer community regarding the necessity of the merger moratorium that is running concurrent with the Board's policy review. Nonetheless, almost without exception, rail customers loudly applaud the Board's efforts to revise its merger policy procedures. ARC will be judging the Board's Notice of Proposed Rulemaking, due out the first week of October, based on the following criteria:

1. *Need*.—Does the proposed rulemaking recognize the need for competition to exist between rail carriers?

2. *Specificity*.—Does the proposed rulemaking provide clear and concise guidelines for enhancing competition?

3. *Comprehensiveness*.—Does the proposed rulemaking identify ways in which pro-competitive conditions can be applied throughout the industry?

In Summary.—The Board has made some small steps in the last two years to address the concerns of the rail customer community. However, the Board's merger policy review is probably the best opportunity that it has to demonstrate that it is relevant in the effort to achieve the full intentions of rail deregulation. The Board must realize that the system is broken, and nothing shy of decisive congressional action that replaces government regulation with true market competition is likely to fix it.

III. THE APPROPRIATIONS COMMITTEE'S ROLE

ARC recognizes that congressional jurisdiction for rail policy reform lies largely with the Commerce Committee in the Senate, and the Transportation Committee in the House. But while the authorizing committees can decide to allow this controversial debate to linger, appropriators are faced each year with the dilemma of whether to continue funding the STB. Should the STB's merger policy review not provide clear guidance for enhancing rail-to-rail competition in an expansive manner, it will have demonstrated a lack of relevancy to the principles of deregulation. In this regard, this committee ought to give serious consideration to specifically directing the use of funding or even eliminating funding altogether.

IV. THE CROSSROADS: WILL RAILROADS WORK WITH THEIR CUSTOMERS TO FIND THE SOLUTION?

The rail industry is at a crossroads that will determine whether it will continue to be a viable commercial service. The long-term viability of rail transportation depends solely on whether rail customers are able to choose among a variety of service levels, offered at economically competitive rates by more than one rail carrier.

Rail industry executives can work with rail customers in the policy arena to restructure rail operations to incorporate this kind of free market competition among rail carriers. Conversely, rail industry executives can cling to the misguided hope that their businesses will survive as long as they can extract maximum revenues from their customers that have no transportation choice. Thus far, rail executives have clearly chosen to continue down the latter path, fighting against the very customers whom they are supposed to serve.

What railroad executives refuse to acknowledge is that today's captive customer is not likely to have the luxury to accept the railroads' monopoly behavior in perpetuity. Consider:

—The restructuring of the electric utility industry is introducing new competitive pressures, and paired with the ongoing environmental debates about coal usage, more and more utility executives are looking at natural gas as the fuel of the future. Not a single coal-fired generation facility has been built in the last 20

years, and there are no new ones on the drawing board. Thus, as old coal-fired generators are retired, railroads will begin to see a serious revenue drain.

—Chemical industry executives have already undertaken massive build-out projects to gain access to competitive rail transportation. Others have begun to make new and relocation facility siting decisions based on competitive transportation alternatives, and some of those decisions are taking the facilities out of the U.S. altogether. Once again, railroads will eventually see dwindling revenues in the movement of chemicals and plastics.

—Grain traffic is already diverting to trucks when at all possible. But the emergence of high value specialty crops—such as peas, lentils, high protein wheats or high oil corns—that move in truck quantities are going to begin to take their toll on rail revenues generated by this sector.

Conventional railroad wisdom is that captive customers are needed to survive, and that any loss in revenues from its captive customer base will require it to make up for those losses elsewhere. Given the dynamic economy that rail customers face, railroads can be assured of revenue losses if they continue the monopolist's business strategy.

Restructuring the rail industry around a competitive framework, however, would put today's railroads back in the game.

While railroad traffic has increased somewhat in recent years—tonnage has climbed by about two percent annually during the 1990s—the industry continues in its long-term trend of declining market share. As shown below, over the past half century, the railroad industry's share of intercity tonnage has dropped from 47 percent of the market to 25 percent of the market.[3] At the same time, the truck market share has increased from 26 percent to 49 percent. These trends have continued throughout the 1990s. Conversely, the "Economic Report of the President" reveals that from 1990 to 1997, the Index of Industrial Production increased by 3.8 percent annually—almost double the rate of growth in railroad tonnage. Of course, some production is consumed locally, but the data shows that railroads are not full participants in the country's incremental production.

[In percentage]

Year	Railroad Market Share	Truck Market Shar
1950	46.7	26.1
1960	36.1	32.7
1970	31.1	36.2
1980	28.7	36.3
1990	27.1	40.3
1995	25.7	46.1
1998	25.1	48.6

Finding the Right Solution.—In this contentious environment, rail customers have fought for legislation that would make modest adjustments to the interpretation of the existing statute. Basing all recommendations on the intent of the original statutory language, rail customers have almost universally supported the following legislative provisions:

1. *Policy*.—Clarify the rail transportation policy of the U.S. by requiring the Surface Transportation Board to give greater weight to the need for increased competition between and among rail carriers.

2. *Bottlenecks*.—Require rail carriers to quote a rate, upon request, between any two points on the system where traffic originates, terminates or may reasonably be interchanged without regard to whether the rate is for only part of the total movement.

3. *Competition in Terminal Areas*.—Eliminate the requirement that evidence of anti-competitive conduct be produced when the STB determines outcome of requests to allow another railroad access to rail customer facilities within an area served by the tracks of more than one railroad.

4. *Relief for Certain Agricultural Shippers*.—Provide small, captive agricultural shippers with a simple benchmark test for rate and service cases.

[3] Rosalyn A. Wilson, Eno foundation, *Transportation in America 1999,* 17th edition. Tonnage data includes railroads, trucks, oil pipelines, water carriers, and airlines.

5. *Market Dominance*.—Codify the STB's decision to exclude evidence of product or geographic competition when determining market dominance.

6. *Revenue Adequacy*.—Abolish the requirement that the Board determine on a regular basis which railroads are revenue-adequate.

However, throughout this year, representatives of the railroad industry have repeatedly stated their intention to continue pursuing mergers as a means of increasing operating "efficiency" and "promoting competition" at some point in the future. In fact, most observers—and even many rail executives—agree that additional mergers will eventually produce a North American rail system monopolized by two transcontinental railroads. In the face of such developments, are the modest provisions rail customers have embraced thus far really enough?

Under such circumstances, is it reasonable to expect that one rail system will compete for customers served by the other, and vice versa? Basic economic theory holds that, in the long run, dual monopolists decide that an activity such as competitive (marginal) pricing is self-defeating because the other supplier will match it. The same theory holds true for service innovations as well. Thus, even with the ability to ask for a bottleneck rate or for access to the second carrier in a terminal area, rail customers are likely to have little or no choice of prices and service levels should the rail industry consolidate further.

In the coming months, the rail customer community will be forced to come to terms with the implications of the railroad industry's end game, and determine its own vision for addressing that end game. As with any monopoly situation, the question will always be "how much access is necessary and appropriate to facilitate meaningful competition?" Thus, the solutions we pursue in the 107th Congress may be quite different than those we see today.

The Impact of Competition on Railroads.—As we consider the future of this evolving industry, it's important to understand that increased levels of competitive access can—and will—benefit all affected parties. Central to the debate over competition is whether railroads must have monopoly power in order to remain financially sound, and if not, how much access is necessary for the forces of free market competition to take hold.

Those who oppose the introduction of competition—and who wrongly refer to any form of competition interchangeably as either "reregulation" or "forced access"—base their opposition on a series of incorrect assumptions:

1. A competitive railroad marketplace cannot sustain the practice of differential pricing, because competition automatically drives all rail rates to equality.

2. Without differential pricing, the industry will not be able to earn sufficient revenues to cover their expenses or provide efficient service to shippers.

3. The reduction of revenues caused by eliminating differential pricing will keep railroads from investing in their infrastructure.

It may sound good, but the evidence suggests otherwise as discussed by Dr. Robert McCormick of Clemson University in a verified statement before the Surface Transportation Board, commissioned by the Chemical Manufacturers Association.

Differential Pricing.—Differential pricing exists for all competitive industries. However, competitive industries differentially price based upon the demand of the consumer. They do not isolate and then plunder one group of customers in favor of another group of customers as the railroads do.

Consider differential pricing in other industries, many with large fixed costs similar to the railroads:

—Hotels allocate certain numbers of rooms to as many as 20 different rate tiers.

—Telephone markets show similar patterns. There are time of day and bulk pricing features; weekends and nights are cheaper than weekdays. Large volume purchasers pay lower prices than small volume users.

—Literary works and movies are distributed in a way that is intended to charge higher prices to those who have a greater desire to read or see them immediately upon release, as opposed to those consumers who are willing to wait. In the case of books, there are hard cover vs. soft cover releases, and for movies, evening vs. matinee showings, theatre tiers, video sale, video rental.

—Airlines offer many levels of discounted seats that allow for different priorities of service and based on advance purchase.

—Electricity has special price tiers, such as peak load pricing, and "green power."

In fact, for its competitive intermodal traffic, BNSF already differentially prices based on demand of the consumer through tiered service packages that have delivery time components (delivery within 80–85 hours; 75–80 hours; 55–60 hours, and guaranteed delivery time with a full price refund).

In each example, these industries share the same features of railroads: large fixed costs that must be allocated across different users. Railroads are not unique, and in fact, these features are becoming more and more commonplace.

So if railroads can practice differential pricing in a truly competitive marketplace, then do the remaining assumptions hold water? No. Clearly, so long as railroads are well managed, those railroads can—at the very least—earn their cost of capital, which in turn allows them to continue investing in their infrastructure at least at the same rate as they do today.

To test our theory that railroads could compete without harming their financial picture, ARC commissioned an analysis based on real world economic behavior and using very conservative data from reliable data sources projecting growth of the key industries that rely on railroad transportation. What we found was that rather than bankrupting the railroad industry, competition would generate increased net revenues to the tune of $500 million annually. Is this a windfall? Certainly not. But the point was not to predict exact revenues, but to identify likely trends if railroads were to be placed in a competitive environment.

As for their ability to invest, the evidence again shows that investment increases when competition is introduced. Telecommunications industry is the best example, because if forcing competition on a regulated industry is truly a prescription for disaster, then the telecommunications industry should be in a shambles—which it is not.

But let's focus on investment levels before and after competition was introduced. Did competition cause investors to withdraw financial capital from the industry? Absolutely not. In fact, investment increased dramatically. Rather than capital flight, there has been a continuous capital infusion into both the deregulated and regulated sectors.

And while there are not a plethora of examples within the rail industry itself, the experience of introducing competition in the Powder River Basin certainly reinforces the evidence compiled by the behavior of other industries.

V. SUMMARY

While financially healthy today, the railroad industry has achieved undue market power, has exercised it to the detriment of large portions of its customers, and has no incentive to change, despite evidence that a continuation of current behavior will result in a continuing long-run deterioration of revenues and erosion of customer base.

These trends are supported—if not actively, then through lack of action—by the Surface Transportation Board. The ongoing merger policy review remains the one opportunity for the Board to do something decisive to prevent further erosion of rail-to-rail competition and even begin to return some competition among railroads. If this opportunity is lost, the relevancy of the Board—and thus the need for continued funding—is called into question.

At this point in the evolution of the rail industry, however, no real solution exists without decisive congressional action. Rail customers will continue to petition Congress to take action as it has in so many other industries to ensure that the right level of access is available in order to develop and maintain a truly competitive marketplace.

Thank you again for the opportunity to testify. The rail customer community and I look forward to working with this subcommittee on these critical issues in the 107th Congress.

ADDENDUM 1: WHO ARE RAIL CUSTOMERS?

The Alliance for Rail Competition represents the diversity of the rail customer community. A brief description of the industries that rely on rail transportation and their specific concerns is summarized below.

Agriculture

Approximately two percent of all Americans are engaged in agriculture as their primary occupation. While it may seem a small number, that two-percent of the population manages to produce enough food and fiber to feed the rest of the country's population, as well as a good part of the rest of the world.

Railroads are an important mode of transportation for the Nation's agricultural shippers. In 1997, railroads moved 1.4 million carloads (126 million tons) of farm products and 1.3 million carloads (86 million tons) of food and kindred products. Although this volume is large, it amounted to only 13 percent of all rail traffic that year.

Railroads are most important in the movement of grain. Grain and oilseed shipments represent about 95 percent of all farm product traffic moving by rail. Since the late 1970's grain tonnages shipped by rail have increased by 23 percent. Railroads also move more grain than barges and as much as all commercial trucks. Rail-

roads account for about 40 percent of all grain shipped from commercial facilities. By comparison, trucks also haul about 40 percent of the grain shipped commercially and barges haul the remaining 20 percent.

Many agricultural shippers are small and face unique challenges in a changing global marketplace. Their exceedingly low profit margins paired with dramatic fluctuations in world economies already place them in a financially precarious environment that Congress has taken a special interest in addressing. These rail customers also have an irrevocable tie to the railroads because in many cases there is no alternative mode of transportation that makes logistical or economic sense.

Having said that, agricultural shippers in some parts of the United States are paying the highest rail freight rates in exchange for arguably the most sporadic and unreliable service. These shippers need a clearly defined means for securing reliable service at a reasonable rate. Agricultural shippers are also unique in that the party that bears the cost of rail transportation—the farmer—is not the party that negotiates the rate for that transportation—the grain elevator. Further, the farmer has no ability to pass on the costs associated with transportation to the customer.

Farmers throughout the western states, including Montana, Idaho, North and South Dakota, Washington, Oregon, Colorado and Nebraska, are paying anywhere from 225 to 300 percent or more of the railroads' revenue to variable cost. Any business in the world would be ecstatic to receive that kind of return on its cost. But even if you assume that the high cost of capital for railroads requires railroads to generate 180 percent revenue to variable cost—a profit margin of 80 percent—you're still talking about an additional return of 45 percent or more.

Maybe this doesn't sound unreasonable to you, but I urge you to keep in mind that this kind of profit is being extracted out of a group that is ill-equipped to afford it: the farmer. Consider this example: A bushel of spring wheat currently sells for approximately $4.15. Roughly $1.00 of that amount, or one-quarter of the price a farmer receives, goes to pay for rail transportation. Stated another way, the average wheat farmer is working for the railroads nearly three months out of the year. If Congress cares about the future of agriculture, and did not intend to place the railroads in a position where they can exploit every last nickel out of their customers, then changes must be made.

While rates are of great concern to many people in the agriculture industry, receiving reliable service is of equal concern. Crop harvests are naturally cyclical in nature, as opposed to other rail traffic that is more evenly balanced throughout the year. But the movement of grain is largely determined by the demand of the global marketplace. When prices in the marketplace are high, farmers want to move their grain, and vice versa. Yet railroad service—or lack of it—can and has prevented farmers from moving their grain when there is demand. It's important to point out that the agriculture community has long suffered from sporadic and unreliable rail service and so long as current policies are maintained, that situation is expected to continue for the foreseeable future.

Over the last 30 years, the agriculture industry has been subjected to an increasing degree of competition with foreign producers—in both domestic and foreign markets. As in all industries, free markets reward lower-cost producers, and also consistent with other industries, the agriculture industry must search for ways to trim costs in order to remain competitive.

That is why the debate over rail competition has become so important to this industry. For the agriculture industry to remain competitive, it can no longer afford to rely on a rail industry that operates as a virtual monopoly. As a critical underpinning of the national economy, the agriculture community's concerns deserve special consideration.

Chemicals and Plastics

The U.S. chemical industry (excluding plastic resins) employs some 955,000 high-tech, high-wage workers. In turn, these lead to the creation of 1.1 million jobs in other industries, bringing total U.S. jobs dependant on the chemical industry (excluding plastic resins) to 2.1 million. This industry is the leading export sector and a substantial contributor to a positive U.S. balance of payments. The chemical industry depends heavily on railroads to safely and efficiently transport raw materials to chemical manufacturing facilities and to deliver a wide variety of finished products to destinations throughout the country. Railroads also transport chemical exports to Canada, Mexico, and U.S. ports.

According to data compiled by the Association of American Railroads, the chemical industry ships about 110 million tons of products (excluding plastic resins) by rail on an annual basis and spends more than $3.5 billion per year on rail freight charges, accounting for 11 percent of the revenue received by U.S. railroads. In many parts of the country, there are chemical manufacturing facilities served by a

single railroad, leading to high costs. The chemical industry, which has participated in a number of major STB rail proceedings, strongly supports rail competitiveness and specifically endorses the recommended legislative provisions discussed in my testimony.

The plastics industry directly employs more than 1.3 million workers. When taken into account the upstream industries, that is the supplying industries, the number of plastics industry employees rises to 2.3 million, nearly two percent of the U.S. workforce.

Recent rail transportation events have shaped the business environment of the plastics industry. There is a growing awareness that transportation is not a separate, isolated function of the supply chain, but rather, an integral part of the production process. When talking about the transportation of plastic pellets, you must remember few other issues address such fundamental business components in corporate America. That is, rail transportation is about: Moving raw materials and products; Meeting customer demand; and Affecting the corporate bottom line.

When addressing the importance of rail transportation to the chemical and plastics industries, economics plays a large part. As an example, for plastics:

—Transportation is the second highest cost component in raw material production (second only to feedstock);

—Transportation can account for up to 20 percent of the finished raw material cost;

—Approximately 60 billion pounds of plastics are shipped each year;

—The plastics industry pays over $1 billion to the railroads each year;

—If a facility is captive, at the point of origin or destination, rates for the exact same rail movement can be 15–60 percent higher than from a competitively served facility.

Given the fact that 75 percent of plastics raw material producers are captive to one railroad, paying higher rates, and generally receiving poorer service—coupled with the fact that the railroads are the only industry in this country to exercise complete monopoly control over their customers—the time has come to start asking why the railroads are able to operate in this type of an environment.

The core issue is the lack of competition in the U.S. rail system. Legislation is needed to address the fundamental way railroads operate.

Forest Products and Paper

The forest, pulp, paper, paperboard, and wood products industry employs approximately 1.5 million people with a payroll of $40.8 billion and ranks among the top 10 manufacturing employers in 46 states. It represents 7.8 percent of the manufacturing work force in the United States. Sales of forest and paper products exceed $275 billion annually both here and abroad. For most producers, transportation costs are the third largest operating cost component after fiber and labor. These costs average between 5 percent to 25 percent of delivered product costs.

The forest products and paper industry is the fourth largest user of rail transportation in the United States and incurs $2.9 billion in annual rail expenses which is approximately 9 percent of all rail revenues. Significantly, the industry's $183 billion of domestic flows combined with the inland portion of its international flows makes the industry one of the largest commodity shippers in the country. Much of the industry's exports and the domestic sales are transported by rail. In fact, the forest products and paper industry moves an average of 24,000 carloads in any given week using proprietary short line railroads and all Class I railroads. The industry is responsible for 70 percent of all railroad boxcar traffic, including 19 million tons of recycled paper, and 95 percent of all centerbeam lumber car traffic. The industry also represents significant carload volumes consisting of inbound raw materials (such as logs, woodchips, coal and chemicals) and thousands of containers carrying finished goods for domestic and offshore distributors. In addition, the industry has a substantial investment in boxcars, tankcars, and other rail equipment.

Rail service problems are currently national in scope. While other transportation modes measure "on time" service in hours, railroads measure it in days. This type of service affects not only the performance of the major remaining railroads, but other connecting railroads and their shippers. For example:

—A forest products company has had a major customer in California insist upon replacing rail service with trucks where the infrastructure to do so does not exist.

—Another company, with four manufacturing operations located in East Texas, experienced service problems with shipments destined to southern California. Rail transit times increased from 14 days to as much as 45 days. Business was consequently lost to competitors as a result of this variable service.

—Delivery problems have caused mill inventories of finished goods to go up. This causes warehousing costs, increased emergency delivery costs, and, ultimately, higher inflation to the general public.
—Variable service, lengthened transit times, and captive pricing contributed to a mill closing by a large forest products company.

The forest products and paper industry needs efficient competitive transportation to be able to compete in a global economy. We are concerned with the changes in the competitive dynamics of the national rail structure and believe that in order to have a healthy transportation industry we need vigorous rail-to-rail competition. Without competition, there is no incentive for the railroads to improve and maintain low cost levels, consistent service levels, and an adequate supply of quality boxcar equipment. To address the issues of rail service, competition and access, the forest products and paper industry endorses the recommended legislative provisions discussed in my testimony. The forest products and paper industry also encourages rail policy to foster the growth of short line railroads through the elimination of "paper barriers" to enable the free interchange of traffic between and among all connecting railroads.

Mining and Utilities

Coal shippers, including both electric utility companies and coal producers, have major concerns with the current law governing the railroads. Coal is one of the largest commodities by volume moved by the nation's railroads. Currently, approximately 54 percent of the nation's supply of electricity is generated from coal, the vast majority of that coal moves by rail from the coal mine to the power plant and a significant portion of that coal has, for at least some portion of its movement, only one available railroad transportation option. Thus, a significant portion of the coal moved in the nation is "captive" to a single railroad for transportation. As such, the railroad customer, who is usually the electric utility that buys the coal at the "mine mouth" and is responsible for arranging the movement of the coal to the power plant, does not have the ability to negotiate the terms of its rail transportation in an open and competitive market.

Some characteristics of railroad coal movements are:

—electric generating plants are designed to use a specific type of coal and typically have relatively few options regarding the source of coal that can be used in the plant, which may have a design life of as much as 50 years or more; the source of coal is further restricted by the location of the plant and its access to rail transportation;
—most of the nation's electric generating plants were built before the railroad mergers of the last two decades severely restricted railroad transportation options;
—normally, the railroad customer (the utility) pays for the railroad cars that move the coal; either the utility or the coal producer pays for the railroad loading facility at the coal mine; and the railroad customer may be forced to pay other costs that traditionally have been considered to be costs to be borne by the railroad;
—coal is moved normally in "unit trains" of approximately 100 cars;
—the unit train movement of coal is highly efficient and extremely profitable for the railroads, particularly where the movement is "captive" and the railroad can demand a price above 180 percent revenue to variable cost ratio; and
—the railroad transportation cost of coal not only affects the cost of the production of electricity, but the price of coal at the mine mouth, which can, in turn, adversely affect the amount of severance tax that most coal producing states collect from the coal produced in their states.

The first choice of coal shippers is for their transportation arrangements to be negotiated in a competitive marketplace, as are their contracts for the purchase of coal and, increasingly, their contracts for the sale of electricity. Some electric generating facilities have transportation options and are not "captive" to a single railroad. Others have been able to achieve competitive railroad transportation options by financing the construction of connecting track ("building out") to a competing railroad. The STB and its predecessor, the Interstate Commerce Commission (ICC), have allowed such "build outs" which have been very important, although costly, tools for achieving competitive transportation alternatives.

Transportation Intermediaries

The Transportation Intermediaries Association (TIA) is the leading organization for North American transportation intermediaries with over 700 member companies. TIA is the only organization representing transportation intermediaries of all disciplines. The members of TIA include: property brokers, domestic freight forwarders,

NVOCC's, intermodal marketing companies, perishable commodity brokers, logistics management firms, and motor carriers.

The 46 member companies of TIA who operate intermodal marketing companies (IMCs) urge Congress to support legislation that will promote increased competition and access for rail service for both large and small rail customers. Increased competition will result in improved customer service from the railroads—particularly for the small to medium size rail customers with whom our members do business. If Congress does not enact rail competition legislation, many small businesses will continue to suffer from poor service and find it increasingly difficult to remain in business due to the lack of safe, efficient transportation on our nation's railroads.

IMCs have also found it exceedingly difficult to even receive rail service for small to medium size customers. Without competition, railroads tend to service larger customers at the expense of the smaller one. TIA believes that Congress must rectify this situation and that all rail customers should be given an opportunity to operate in a competitive, free-market environment.

ADDENDUM 2: ANECDOTAL INFORMATION

Anecdote #1:

The operator of a Montana grain elevator, in the fall of 1998, became frustrated with the BNSF. He had ordered cars in September 1998 and the BNSF indicated they could deliver in October. October came and went, and soon November was drawing to a close.

When he got the BNSF on the telephone, they stated the cars he ordered would be available at his elevator on that Saturday. He hired the crews necessary to load the train, and on Saturday morning he waited. And he waited. At 2 p.m. he called the BNSF . . . and they stated that although they were sorry, they would not be able to deliver the cars for another week.

After an angry exchange, a grain elevator employee came into the office and said the train was coming down the track! Yet the rail operations people on the other end of the telephone line, were adamant that it would be another week.

Sure enough, it was their cars and they promptly loaded the train with grain and released the cars back to the BNSF on Sunday.

Two weeks and one day later, the BNSF finally picked up the train for shipment.

Anecdote #2:

Several lumber shippers in NW Montana and Northern Idaho, requested that the BN give them a contract rate similar to a large lumber shipper and wholesaler in the Pacific Northwest.

The BN refused, stating that these complaining shippers couldn't meet the requirements of that rate. The shippers asked what the requirements were and the BN stated they were confidential and they couldn't tell them because they were part of an on-going confidential transportation contract.

The shippers banded together and formally challenged the very next confidential contract the BN filed with the ICC on a movement of this shipper.

The BN lumber personnel stated to the complaining lumber shippers that they would never get this contract opened up for public review.

However, the ICC felt after review that the complaining lumber shippers were adversely affected and ultimately did open up the contract to confidential review by the complaining shippers. The result was that the BN had to reluctantly offer the same contract to the complaining group, which promptly exercised its rights to the contractual provisions. The BN stated at the time, that to offer this contract to lumber mills, would do violence to the lumber industry. The results have proven much different—the lumber mills as a group, are better able to compete against the big lumber wholesalers.

However, the BN promise to give the wholesalers a better deal than the lumber mills, did hold up.

Anecdote #3:

In 1987, MRL put in a confidential contract on wheat from Big Timber, Montana at a newly constructed grain transfer facility. The contract called for rebates (legal ones) to the shipper if the shipments met a minimum number of cars.

The contract allowed the new facility to be effective over an area previously not served by the MRL. However, the new facility was told after a year of operation that the BN had become upset with the fact that this facility was providing competition to BN points and therefore demanded that MRL not renew the contract. The effect of non-renewal was to put the facility out of business, which is what the BN wanted, because it could not draw grain more than 40 miles due to the lower rates on the BN.

Anecdote #4:

BN, in mid-1980s, presented a small grain shipper with a $150,000 demurrage bill for shipments of piggyback from Montana into Portland.

In the mid-1980s in Billings, the BN intermodal folks had a great number of truck trailers arriving in Montana but leaving empty back to the West Coast. In the spirit of identifying a win-win situation, a small grain shipper in Billings, approached the BN intermodal folks with a proposal. If the BN provided the grain shipper with a low rate, they could fill the empty truck trailers with grain for shipment to Portland for unloading. This endeavor started to become very popular and soon the BN Intermodal facility in Billings was shipping a great number of piggyback movements from Billings to Portland.

The situation in Portland, however, soon became a mess. The grain houses in Portland have only so much capacity to unload piggyback movements and became hopelessly behind.

The BN Intermodal people, however, kept supplying more and more truck trailers for loading in Billings, and not knowing of the capacity problem in Portland, the shipper kept filling an ever-increasing number of trucks loaded with grain to Portland.

After about 6 months of delayed unloading, the BN embargoed the shipments but presented the shipper with a demurrage bill for $150,000+ and turned the issue over to its Law department.

The shipper, after a year of wrangling with the BN (in which the BN threatened the shipper with financial ruin), finally convinced them that they were the ONLY ones who knew the transportation situation in Portland, and were the responsible party for embargo of shipments they knew had no chance of being unloaded. The BN subsequently settled the case for about $3,000!

Anecdote #5:

A major Fortune 500 petrochemical rail customer shipping petroleum coke from Billings to Salt Lake City located on both BN and Montana Rail Link ships tens of thousands of tons each year wanted to route MRL, Montana Western, UP to Salt Lake City. It would save many miles of route, and a week in transit time.

In January 2000, Montana Western (located between UP and MRL) requested the rate from MRL. MRL cannot set the rates, but must ask the BNSF for permission even though the shipment on this route never went over the BNSF tracks. The BNSF has consistently refused to allow the movement and forces the rail customers and receivers in Salt Lake City to pay higher rates for poorer service and keep much larger inventories for more inconsistent deliveries.

Anecdote #6:

Over the past two years, the small to medium size intermodal marketing companies (IMCs) have been fighting railroad efforts to drive them from the marketplace in favor of their larger counterparts. These IMCs serve America's small businesses and provide them the ability to get their goods to market at an affordable price. Unfortunately, railroads seem only interested in dealing with a handful of the largest intermodal companies. Thus, some of the rail carriers erected artificial barriers in the form of guaranteed volume contract requirements that were so high as to prevent IMCs from using rail service.

For example, the Burlington Northern/Santa Fe Railroad in 1998 almost overnight raised their volume requirements from $500,000 to $5 million annually. As a result of these volume cap increases, as many as 60 percent of IMCs lost their contracts because they couldn't meet the new, unilaterally imposed BNSF levels.

Currently, Norfolk Southern is indicating that they will raise their annual requirements from 250 units to 1,200 units effective January 1, 2001. This would occur even though the railroad told the STB that the merger would take one million trucks a year off the road. If NS raises its volume requirements, small businesses will have no choice but to ship by truck—drastically raising transportation costs and jeopardizing their continued profitability.

Union Pacific Railroad has just announced new procedures for the disbursement of repositioned equipment during peak season in Los Angeles. The railroad plans to give priority treatment to eight IMCs, four of which are large IMCs, with only two smaller IMCs included. This action will have the ability to get repositioned equipment. This is a serious problem because equipment shortages are rampant during the peak season. There are currently 75 IMCs that operate in the United States. Why should eight IMCs that are chosen by the railroad be given priority treatment? In a free, competitive market, every competitor should be given an equal opportunity to succeed in their business. Why should rail carriers pick and choose whom the winners and losers will be?

Anecdote #7:

Arizona Chemical Company (AZ), a subsidiary of International Paper, is currently being pummeled by the monopoly power of Norfolk Southern (NS).

The rail contract AZ had with NS expired at the end of June, and was extended for a month so the parties could attempt to negotiate a new contract. However, NS decided to terminate allowances on all AZ traffic, effectively increasing its rates 21 percent on an overall basis. Although AZ indicated that it was willing to discuss rate increases, it would not do so unless NS was able to improve on its inadequate service and committed to undertake to measure its service. NS then advised AZ that this was unacceptable and that it would raise the rates essentially because it could do so. When AZ refused to sign the contract, NS then put in place, effective 8/1, what amounts to a 40 percent rate increase on AZ traffic.

AZ then refused to pay the increase, at which point NS threatened to put AZ on a cash basis, in which case it would not deliver or pickup cars unless AZ paid in advance via cash or certified check. Regrettably, since that would plainly disrupt or even threaten AZ operations, it had no choice except to pay the claimed balance due.

So, and notwithstanding that its service is woefully inadequate, NS was able to force a 40 percent rate increase down AZ's throat simply because it believes that AZ has no reasonable competitive alternative.

In an attempt to try to work this out, AZ representatives contacted Chairman Morgan's office and requested that they approach NS about this, suggesting that the Board advise NS that, if it really felt it was entitled to some rate increase, it should agree to submit the matter to mediation or arbitration under the Board's established procedures. To the Board's credit, it pursued the matter and spoke with representatives of NS. Unfortunately, those phone calls made by the Chairman's office ultimately had no effect, as NS apparently sought to excuse its actions by alleging that the increase was not related to the Conrail transaction or its service problems, that it was losing money on AZ's traffic and that AZ could have avoided the 40 percent increase by signing the 21 percent increase contract.

Anecdote #8:

FMC Corp. is one of the Union Pacific Railway's (UP) biggest customers, spending approximately $90 million annually for rail service provided by the UP. In 1996, UP published considerably higher tariff rates for FMC commodities after FMC already had invested heavily in new loading and unloading facilities to improve UP productivity. Following a year of failed rate negotiations, FMC filed a complaint with the Surface Transportation Board on October 21, 1997. FMC's complaint involved 2 million tons of soda ash, phosphorus and similar commodities shipped in some 20,000 rail cars over a period of three years from FMC's Green River, Wyoming and Pocatello, Idaho facilities. According to FMC's analysis, the company was forced to pay rates that were as much as 600 percent above UP variable costs for providing the transportation—solely because the UP had monopoly power over FMC's traffic.

On May 12, 2000—2½ years after the initial filing, the STB concurred with FMC's position by determining that Union Pacific held monopoly control over 15 of the 16 challenged routes. Although it concurred with FMC on the merits of the case, the Board's decision effectively compensated FMC for only 20 percent of its total past costs (i.e., legal/expert costs + the difference between prescribed and tariff rates during the 3 year period of the case). Furthermore, the costs of UP's service meltdown and merger with Southern Pacific were considered as allowable UP costs, subtracting from their penalty. And future rates were based on a railroad designed for peak, rather than normal volume days.) These terms effectively eliminated the bulk of any economic benefits the company might have realized by winning the case. Nonetheless, Union Pacific has appealed the decision.

The case itself (not counting earlier negotiations) has lasted 34 months (filed on October 31, 1997) and, with appeals, there is still no finality to the STB's decision. Both parties continue to incur substantial legal and expert costs to bring this case to closure. To date FMC has spent over $6 million on legal and expert resources to address procedural and substantive issues.

Anecdote #9:

Among the conditions applied by the STB to the UP/SP merger were several conditions directed specifically to the competitive harm that otherwise would have been suffered by 2-to-1 shippers. A condition granting extensive trackage rights over UP/SP lines to the BNSF railroad was imposed for the stated purpose of protecting most 2-to-1 shipper. Further, an "omnibus clause" was imposed to protect any 2-to-1 shipper not covered by those trackage rights, requiring UP and BNSF to enter into arrangements "under which, through trackage rights, haulage, ratemaking authority

or other mutually acceptable means, BNSF will be able to provide competitive service" to each 2-to-1 shipper covered by the clause.

However, the omnibus clause in practice has been proven to be of little value as demonstrated by the Board's decision in the Union Electric case, decided on May 31, 2000. Union Electric operates a coal-fired electric generating plant at Labadie, Franklin County, MO, which was accessed, prior to the UP/SP merger, by UP and by SP and by no other railroad. There is no dispute as to the 2-to-1 status of UE's Labadie plant. The question is whether Union Electric has a right to receive competitive service under the omnibus clause, and whether an addendum to an existing contract changes that contract so radically as to eliminate Union Electric's ability to make use of the omnibus clause.

According to the Board's decision: "The UP/UE contract at issue was entered into prior to the consummation of the merger by a 2-to-1 shipper, on the one hand, and UP, on the other hand; it was negotiated under the auspices of old 49 U.S.C. 10713; and it was in effect at the time the merger was consummated. It therefore follows that, at the time the merger was consummated, the contract modification condition applied to this contract. "The contract modification condition, however, applies only to contracts that were "in effect at the time the merger was consummated," Merger Dec. No. 57, slip op. at 9, and must be exercised "prior to the expiration of a contract" to which that condition applies," Merger Dec. No. 57, slip op. at 10. The ICC–WRPI–C–0080 contract was amended in 1999 by an "Addendum Three," and we agree with UP's assessment that this addendum amounted to "major surgery" on the underlying contract."

Thus, despite a fanfare of announcements about the Board's affirmation of 2-to-1 shipper rights, the STB actually ruled against the shipper by rejecting a request that UP be ordered to open Union Electric's contract for renegotiation—a pro-competitive condition the shipper thought had been imposed as part of the UP–SP merger approval.

BARRIERS TO COMPETITIVE ACCESS

Senator SHELBY. Mr. Crowe, our State, Alabama, is primarily served by two major railroads, CSX and Norfolk Southern. Does Walter Industries and your subsidiary short line, is that Jefferson Warrior——

Mr. CROWE. That is correct. It is Jefferson Warrior.

Senator SHELBY [continuing]. Have access to both of these major railroads?

Mr. CROWE. We do.

Senator SHELBY. Are you restricted in any way, by contract or so forth, with them?

Mr. CROWE. We experience a lot of barriers——

Senator SHELBY. Okay.

Mr. CROWE [continuing]. And a lot of difficulties with our short line.

Senator SHELBY. Explain some of that.

Mr. CROWE. Well, an example would be, we originate a lot of tonnage going out of our plants that are manufactured. We also bring much of our raw materials into our plants.

Senator SHELBY. You ship in and out, do you not?

Mr. CROWE. We ship in and out, and we do a lot of our own switching in our plants. The paper barriers, and problems like car bunching, and all these things, point to a less than cooperative attitude.

Senator SHELBY. Well, elaborate a little on paper barriers.

Mr. CROWE. Well, a paper barrier that we have experienced is that when we moved coke from our coke facility, even just across the road to U.S. Pipe, that uses foundry coke, we have some barriers and difficulties in gaining permission to cross Class I rail-

roads. These type barriers make it difficult to be timely. Also, when we——

Senator SHELBY. In other words, you mine coal, you produce coke, which is a manufactured process——

Mr. CROWE. Correct.

Senator SHELBY [continuing]. And then you move the coke, which is a by-product——

Mr. CROWE. That is correct.

Senator SHELBY [continuing]. To another industry, where you make pipe, is that correct——

Mr. CROWE. That is correct.

Senator SHELBY [continuing]. From a foundry, and you have to cross a Class I railroad.

Mr. CROWE. Yes. We have to cross Class I railroads, and in many cases it makes it very difficult to do this. The access ability to the Class Is and the difficulty that we experience is quite significant.

Senator SHELBY. Do you consider at the end of the day you are basically a captive shipper, in a sense?

Mr. CROWE. Oh, definitely. We are captive in many ways. As I stated earlier, from the standpoint of the raw materials that we receive for our chemical manufacturing and for our other manufacturing companies, as well as captive, to where our customers may be, in shipping out our finished product, we are captive both going and coming, and that makes it very difficult.

LIMITED TRANSPORTATION CHOICES

Senator SHELBY. Okay. Mr. Aasmundstad, I appreciate your joining us today. This is not the middle of the wheat harvest in North Dakota, is it?

Mr. AASMUNDSTAD. Yes, it is.

Senator SHELBY. It is?

Mr. AASMUNDSTAD. Yes, it is.

Senator SHELBY. We should get you back there. What is the market for your wheat? In other words, walk us through, if you would, the process of getting the grain from the field to the market, and what you have to do in your State.

Mr. AASMUNDSTAD. Well——

Senator SHELBY. Does that make sense to you?

Mr. AASMUNDSTAD. Sure. It varies greatly. Everything is naturally trucked from the field to storage facilities, whether they be on the farm or whether they are a grain-purchasing company. Many times during harvest, and I have to qualify, not so much the last couple of years, because the quality and the quantity of our crop has been very low, but in years previous, and with no reason to see any difference now with a quality crop, many times there have been—the elevators are virtually plugged, due to the lack of cars.

Another thing that is very troubling in moving our grain up there, being the captive shippers, is, as Ms. Duff explained, the competitive disadvantage that a railroad could bring about between one grain purchaser and another by showing favoritism.

Senator SHELBY. Does that go on?

Mr. AASMUNDSTAD. You bet.

Senator SHELBY. Give us an example of that.

Mr. AASMUNDSTAD. A large grain purchasing business definitely has a competitive advantage over, say, a small local shipper, and the fact that they have to bid to the merge.

There have been cases where that the small shippers, if they want cars at a specified time, have to bid what amounts to a restrictive fee over normal freight rates to receive those cars when they—receive a guarantee. That makes it very, very hard for the small shippers to survive.

Senator SHELBY. Is shipping by rail the only practical way to——

Mr. AASMUNDSTAD. It is the only practical way to do it. We are from 300 to 400 miles away from any river port of the Great Lakes, and you cannot ship it by truck competitively.

Senator SHELBY. Do you have access to more than one railroad for the people in North Dakota?

Mr. AASMUNDSTAD. We have a few short lines. There again, the problem——

Senator SHELBY. No main shippers.

Mr. AASMUNDSTAD. No. One.

Senator SHELBY. Are the grain producers, in your opinion, more cut off from transportation options than other industries, or some other industries?

Mr. AASMUNDSTAD. Well, I think they are. Mainly, other industries have a vehicle to pass costs along. We do not. As Senator Burns said, we sell wholesale by retail, and with some of the regulations proposed dealing with truck traffic and truck safety, it is going to be virtually impossible for a lot of people to afford.

You cannot hire two drivers to drive a truck, it is economically impossible to do. The other thing that we are looking at is, we have to move further and further, move our grain further and further. We bear the costs of repairing our State highways, our county roads, that just cannot bear any more heavy truck traffic.

Senator SHELBY. Ms. Duff, your alliance, your organization represents a number of U.S. manufacturing industries. Do not these companies have other shipping options besides rail, or would you explain?

Ms. DUFF. It is often kind of amazing to a lot of people to consider that large chemical companies or large utilities are being held captive by a railroad, and that they do not have any opportunity to really negotiate out of that.

The fact is that you really are only buying rail service on a facility-by-facility basis, and so long as that facility has one railroad, it does not matter how big your company is, you are still stuck with dealing with that one railroad.

Now, some companies that are large enough have managed to leverage that size in their negotiation with railroads, but it is really so modest. They are still put at a disadvantage to those other people in their own industries that have competitive options. So they can improve it in some regards, but overall they are held captive, and there is not a lot that they can do about it.

DEFINING "CAPTIVE SHIPPERS"

Senator SHELBY. How do you define yourself captive shipper, the term captive shipper? Is this different from what the railroad industry defines as captive?

Ms. DUFF. Well, it probably is different.

Senator SHELBY. Yes. Go ahead.

Ms. DUFF. It is always a moving target. What we have tried to do——

Senator SHELBY. It is how you look at it, is it not?

Ms. DUFF. What we have tried to do for consistency sake is rely on the statutory definition of captive, which is, if you are paying a rate of 180 percent of revenue to variable costs or higher, then you are captive. The reality is, if you have one railroad that goes to your facility, you are captive, and there has been no real effective way to make that count.

If you have options with trucks or barges, then you are not captive, and most people who have those options are not involved in the Alliance for Rail Competition, or even in this debate, and it is very easy for them to say, "Hey, my rail service is fine." Surprisingly, the railroads are performing better in areas where they actually have to work to save their customers.

Senator SHELBY. It is my understanding that the American Chemistry Council states that 63 percent of their member companies are captive to service by a single railroad. Do you know if other industries have a similar high percentage of captive shippers?

Ms. DUFF. We did a commodity study in 1997, updated in 1998, and the coal, chemical, and grain industries are the top three captive revenue producers for the railroads. The coal industry is producing $3.5 billion for the railroads in captive revenues. Those are movements that are moving at a 180 percent of revenue to variable cost or higher. The chemical industry is moving at about $2.5 billion, and the grain industry at just shy of a billion dollars. So all three of those industries are contributing heavily on a captive rate basis.

Senator SHELBY. Ms. Duff, I have been told that railroad shipping rates, when measured in revenue-per-ton mile, have fallen since the Staggers Act was brought about. If this is the case, then why do we hear so many complaints about shipping rates?

Ms. DUFF. Well, revenue——

Senator SHELBY. Do you understand what I am getting at?

Ms. DUFF. I do.

Senator SHELBY. Is that how you measure it?

Ms. DUFF. Well, it is how you can measure it——

Senator SHELBY. How you can measure it.

Ms. DUFF [continuing]. But revenue-per-ton mile is not the same thing as a rate. You do not pay a revenue-per-ton mile. First, it is important to understand that revenues——

Senator SHELBY. Are you talking about apples and oranges?

Ms. DUFF. Absolutely. Revenue-per-ton mile, as a measurement, has been steadily declining since at least 1935. So that as a measurement alone has very little to do with the regulatory climate.

Second of all, that measurement is basically a complex average of a number of different factors, so as the rail industry changes its characteristics, it is natural that that revenue-per-ton mile measurement would decline regardless of what is happening with rates. Rates could stay the same or even go up, and the revenue-per-ton mile would be declining.

Senator SHELBY. It has been alluded to that the United States could, I am not sure we will, but we could end up with two major railroads in this country. What would happen then? What would be the effect on manufacturers and shippers? All of you.

Ms. DUFF. Well, I would just start off by saying that in effect right now rail customers are faced with regional two-rail monopoly situations. We have two operating in the east and two operating in the west. Basically, a two-railroad system spread over the entirety of North America further eliminates the potential for competition that currently exists running down the middle of the country, and I think that it really calls into question a lot of the issues that we have been debating about bottlenecks and terminal access, for example.

There is very little evidence to show that rail customers are going to be willing to come to the board for relief. Bottleneck rates might be granted, but there is no reason why those rates are going to be any better than what is happening right now, and there is no reason why the board is necessarily going to grant access in a terminal area.

So I think that what we will see is continued long-term thinking on captive industries' part, where they are going to start looking at the structure of what their businesses are, and making some significant changes to get out from underneath the rail monopoly.

Senator SHELBY. Okay. Do you have any comments, sir?

Mr. AASMUNDSTAD. Yes. If we end up with a two-railroad system in this country it is going to be absolutely devastating to the agricultural industry from the point I brought up earlier that if the two-railroad system or the surviving railroad in the system shows any favoritism at all to a shipper, and I am not calling a farmer a shipper, the farmers are at the end of the food chain on this, but to an agricultural product purchaser, they could have very heavy dictate on who survives and who does not in the agricultural industry from farmers right to the purchasers of the raw products.

Senator SHELBY. Choose winners and losers.

Mr. AASMUNDSTAD. You bet they could, because they will have the ability to move the product.

Senator SHELBY. Mr. Crowe?

Mr. CROWE. I have concluded my comments, Mr. Chairman, and we appreciate the opportunity to be with you. Alabama manufacturers and manufacturers throughout the country are looking to the Congress to bring about some behavioral modifications that are direly needed. It is very expensive to go before hearings and to conduct extensive hearings, and we must now come to the Congress to bring about some vital reform in this area.

RAIL SERVICE PERFORMANCE AND MARKET SHARE

Senator SHELBY. Let me just share this with all of you. I am sure you have seen this before. An April, 1999, GAO report on railroad regulation showed that the railroads market share of freight movements versus truck traffic, river and canal traffic, and other transportation modes, the data show the percentage of rail traffic staying relatively constant, while truck traffic had increased dramatically from 25 to 30 percent of total traffic carried between 1990 and

1997. Is that a factor in lack of competition or competitive access driving that, or what is?

Ms. DUFF. Well, I think it is a reflection on the performance of the rail industry. Everybody who has really—that used to use railroads, that had a choice with other modes, have pretty much systematically turned to trucks or other modes of transportation where that opportunity was allowed for.

There are a number of different measurements. I have heard the ATA talk about trucks are carrying 87 percent of the nation's freight. If you look at the industrial productivity measurement, that has been increasing by 3.8 percent, whereas rail tonnages have been increasing by something like two percent, so less than half. These are all statistics that really reinforce the idea that railroads are not carrying the amount of freight that they should.

I think the railroads would argue that that is a factor of the competitive stance that they are in. The fact is, they are not competing, they are not providing the kind of service, and as a result, our entire transportation infrastructure is suffering as a result.

Senator SHELBY. I want to thank all of you on the first panel for your participation here today. I do not know what the answer is, but at least we are talking about it, and we are holding hearings. Thank you. I thank all of you.

Ms. DUFF. Thank you.

Senator SHELBY. Thank you. Our second panel, we have Mr. Edward Hamberger, President and Chief Executive Officer, Association of American Railroads; Mr. Frank Turner, President of the American Short Line and Regional Railroad Association. Gentlemen, if you-all will come up. Your written testimony will be made part of the record, without objection, and you may proceed as you wish. Mr. Hamberger, do you want to proceed first?

STATEMENT OF EDWARD HAMBERGER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, ASSOCIATION OF AMERICAN RAILROADS

Mr. HAMBERGER. Indeed.

Thank you, Mr. Chairman. On behalf of the Association of American Railroads and our member companies, I appreciate the opportunity to be here to give you our views on the issue of competition in the freight railroad industry. You have been kind enough to make my written statement a part of the record, and in that statement we deal with the issue of competition in the traditional fashion. We walk down and point out that there is, indeed, pervasive rail-to-rail competition. One of the members of the first panel acknowledged that he has rail-to-rail competition.

INTERMODAL COMPETITION

We point out that there is intermodal competition from our friends in the barge and towing industry, and, of course, our friends, and also customers in the trucking industry. Of course, we point out that, notwithstanding, there are some who believe that there is no such thing as product and geographic competition. There is product and geographic competition out there affecting choices and acting as competitive forces on the rail industry.

COMPETITION FROM COUNTERVAILING MARKET POWER

Finally, Ms. Duff was kind enough to acknowledge that, indeed, there is competition from countervailing market power. Now, we disagree as to how pervasive that is. We believe that countervailing market power is exercised by many of our particularly larger customers, but it is out there, and we do agree on that.

I guess the most compelling statistic I would point to from that testimony is that while we carry 40 percent of the nation's ton miles in freight, we collect only 10 percent of the freight revenue dollar. That gets me to—what I would like to do today, Mr. Chairman, if I might, is look at this issue of competition in terms a little bit different, and that is in terms of what you deal with every day, in terms of money—money, revenue, investment capital, where it is, how it is spent, what the impact is, and who, indeed, should be responsible for spending it.

ADEQUATE INFRASTRUCTURE INVESTMENT

This subcommittee more than any other knows the significance of an adequate infrastructure investment. You know in the programs that you administer what happens when there is not adequate expansion of capacity, when there is deferred maintenance, when technology does not keep pace. Unfortunately, we in the freight rail industry also know what happens when those things occur, and that is why since 1980 we have spent $266 billion, money earned in the private sector, $266 billion to improve our infrastructure.

That has made us the most capital-intensive industry in the country. Last year alone we spent $6.6 billion in capital investment, out of a total for the industry of $33 billion in total revenue, almost 20 percent of the total revenue reinvested back into the industry.

Again, in terms that you deal with in other modes, that would be equal to a $2.04 expenditure for every gallon of diesel fuel we burned last year. That is a heck of an excise tax, $2.04, and that is not going to stop there. We estimate that we are going to have to reinvest ourselves twice over in the next 20 years.

Now, what has been the result of all this investment? We think, quite simply, according to the World Bank, it has made us the best freight rail system in the world, the lowest rates, and the best service, according to the Lou Thompson, of the World Bank.

Our customers benefit from this investment, because we have improved productivity 171 percent since 1980. Rates, according to the GAO, have fallen on an average of over 4 percent per year since 1980.

Our employees have benefitted, because accident rates have gone down 70 percent. Last year was our safest on record by some measures, and the first 6 months of 2000 are on track to be even better.

The economy benefits, because our customers in the chemical industry experience a 99.99 percent rate of safe transportation of hazardous materials from origin to destination without incident. Of course, the economy, as a whole, has benefitted. According to a Brookings Institute study just released, the benefit to the American

economy each year since the Staggers Act has been $12.3 billion in improved productivity and lower prices.

And yes, railroads, too, have benefitted. We have gained market share incrementally from 35 percent in 1980 to 40 percent, and we have climbed out of the abysmal 1 to 2 percent rate of return on investment, up to a modest, if not robust, 9.4 percent last year. That puts us, I should point out, still behind the rest of the American economy.

In 12 of the last 15 years we have ranked in the lowest quarter of the Fortune 500 companies in terms of return on equity. Remember that this is the industry which is the most capital intensive in the country, and which routinely spends 15 to 20 percent of its revenues on capital investment.

Now, we have before you, the Congress, a whole series of proposals coming forward under different names, First Access, Competitive Access, Open Access. We call them re-regulation, because we think that's what they amount to. But no matter what you call them, they all have one thing in common, the net result is an outflow of capital from the freight railroad industry to a select customer base.

We would lose anywhere from $1.3 billion to $2.4 billion, depending on the proposal and depending on your estimate, but everyone agrees that there would be a net outflow of money out of the railroad industry, and a loss of ability to make capital investments. If we lose that ability to invest capital, we will have no choice but to, as the Wall Street folks say, harvest. We would disinvest. We will have deferred maintenance. Safety, unfortunately, would go the wrong direction. Service would get worse. Productivity would decline.

I submit to you, Mr. Chairman, that that brings us back to how I started, to the work of this subcommittee, and what you deal with every day, and that is money, because I predict that if any of these proposals pass, that in the not too distant future you will have another panel of shippers and customers up here, and what they will not be talking about then is competition or bottleneck, they will be talking about the need to get a couple billion dollars more in Function 400 to reinvest in the freight rail industry.

I would say that there are really only two sources of investment capital. Either it comes from the private sector or it comes from the government. Right now the private sector has been shouldering that responsibility, and I believe with admirable results.

PREPARED STATEMENT

The real question before you, stripped of all the veneers, is who should be responsible for railroad investment. Should we continue the current system, where the private sector shoulders that responsibility, or by re-regulating the industry, shift that responsibility to the taxpayer? I admire Mr. Aasmundstad for putting that on the table as well. Who should have that responsibility, the private sector or the public sector? We strongly urge you to remember the lessons of the past, and keep that responsibility in the private sector. Thank you for the opportunity to be here.

[The statement follows:]

PREPARED STATEMENT OF EDWARD R. HAMBERGER

I would like to thank you for providing me with this opportunity to address this committee about freight rail competition issues. This topic is especially appropriate now, just weeks from the 20th anniversary of the Staggers Rail Act of 1980. Indeed, now is an excellent time to look back on what has transpired since the passage of the Staggers Act, and review how that legislation has allowed the rail industry to become a competitive factor in the transportation marketplace. Moreover, we should look at what our nation could face if the tremendous gains made possible by the deregulation embodied by Staggers were reversed through short-sighted reregulation. If the railroads are to continue to provide low cost and efficient transportation, pursue service enhancements, and continue to realize dramatic safety improvements, they must be free to operate effectively in the competitive marketplace.

CURRENT REGULATORY ENVIRONMENT

The story of the rail industry's stagnation under the scheme of pervasive regulation in effect prior to the Staggers Rail Act of 1980 and its dramatic revitalization since Staggers is well known. In enacting the Staggers Act, Congress recognized that railroads faced intense competition from trucks and other modes for most categories of freight traffic, but that prevailing regulation precluded railroads from earning revenues sufficient to maintain and replace the rail infrastructure and thus thwarted the industry's ability to compete. Survival of the railroad industry required a new regulatory scheme that allowed railroads to establish their own routes, tailor their rates to market conditions and differentiate rates on the basis of demand.

The reforms that Congress enacted and President Carter signed into law have been an unqualified success. The pricing and routing freedoms of the Staggers Act have enabled railroads to rationalize their systems, reinvest in productive rail infrastructure, generate higher levels of service and dramatically increase productivity, resulting in lower rates for shippers. The regulatory system relies on competition in the marketplace to govern rail rates and service and at the same time provides a regulatory safety net for those instances where there is no effective competition for rail transportation.

RAILROAD COMPETITION

There are some observers who claim that railroads have too much market power. They often point to the number of Class I railroads to prove their point. But the fact is that neither the absolute number of railroads nor the number of railroads of a particular size is a true measure of the intensity of competition. Competition can be meaningfully assessed only with reference to the strength of the competitive options available to particular shippers. These options can take many forms.

Rail-to-rail competition is one such option for many shippers. The nation's more than 550 freight railroads form a highly interdependent and highly efficient national rail system that actively and effectively competes for existing and potential traffic. Shippers are continually exercising their options to play one railroad off against another.

Railroads compete not just among themselves, but in the larger market for freight transportation services. As such, they face extensive competition from trucks, water carriers, and/or pipelines for their traffic. The rail share of intercity freight traffic is a stark reminder of the intensity of this competition. Measured in ton-miles, rail's share of intercity traffic fell steadily for decades, from around 75 percent in the late 1920s to 35 percent in 1978. Only since deregulation has rail market share begun to inch upward; it currently stands at about 40 percent. The intensity of intermodal competition is illustrated even more vividly by the railroads' market share of intercity freight revenue. Though railroads currently account for 40 percent of total intercity ton-miles, they are able to generate only 10 percent of intercity freight revenue, and the rail revenue share has continued to fall.

Rail customers can also take advantage of product competition, which refers to the ability of shippers and receivers to substitute one product for another in their production process. Coal transported to electric utilities is a good example. Although utility coal is the railroads' most important commodity, some 44 percent of the electricity generated by utilities in this country is produced from fuel sources other than coal and, in fact, competes against coal-fired generation.

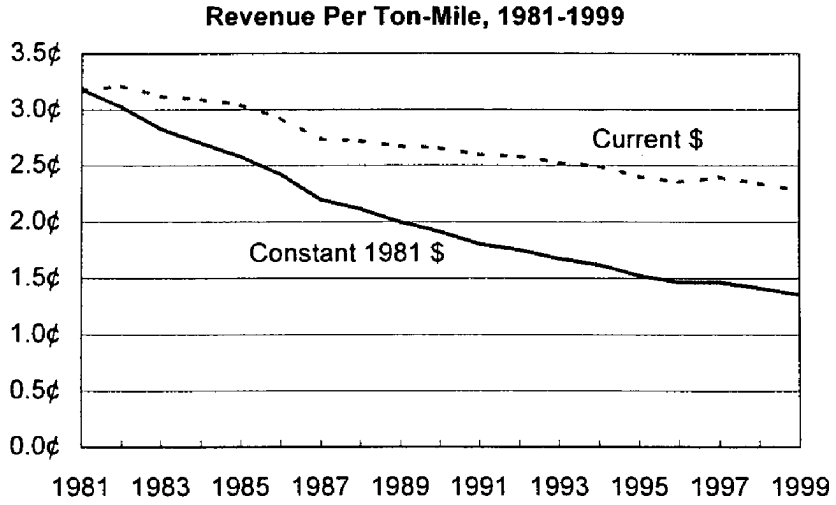
Geographic competition, which refers to the ability of shippers and consignees to buy from or sell in any number of geographic areas, also constrains railroads in many markets. Suppose, for example, an exporter requires grain for shipment

abroad. The exporter could buy grain from sources in any number of different states, playing each source—and the railroad(s) serving it—against the others.

And, of course, railroad customers frequently possess extensive countervailing market power. This is particularly true of large, sophisticated companies with multiple locations. These companies can obtain price or service concessions by shifting or threatening to shift traffic among plants—causing the railroads that serve them to compete against each other. Indeed, many individual rail customers rival or exceed the size of the entire rail industry.

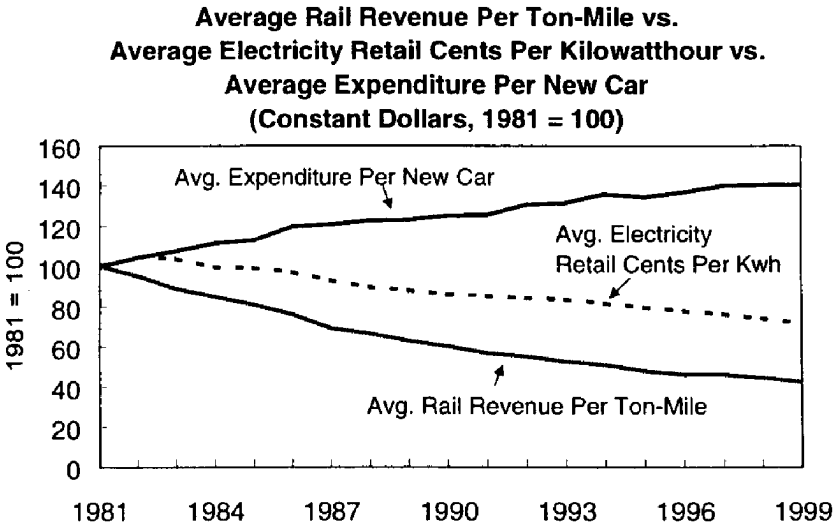
RAILROAD RATES

The competitive forces unleashed by the Staggers Act have resulted in sharply lower rail rates. In fact, from 1981 to 1999, rail rates (as measured by revenue per ton-mile) have fallen 28 percent in current dollars, and 57 percent in inflation-adjusted terms. This trend in falling revenue per ton-mile was not isolated to only a few commodities: each of the major two-digit Standard Transportation Commodity Code groupings enjoyed declines expressed in both constant and current dollars, although the impact varied among individual commodity categories. This broad, sharp decline in rail rates is evidence of the competitive market constraints railroads face.



Source: AAR

To place the post-Staggers railroad rate declines in perspective, the chart at right compares railroad revenue per ton-mile (in constant dollars) with the average retail electricity rates per kilowatt hour and the average expenditure per new automobile. The 57 percent decline in the railroad measure from 1981 to 1999 is in contrast to the 28 decline in electricity rates and the 41 percent increase in new car prices.



Sources: AAR, Energy Information Administration, International Trade Administration

Numerous independent studies which examine the behavior of railroad freight rates have consistently concluded that rail rates have fallen. For example, a study released just last week by the American Enterprise Institute/Brookings Institution Joint Center for Regulatory Studies (AEI/Brookings) noted that economic efficiency grounds do not justify increasing rail competition. The study cited rail customer benefits worth $12 billion per year in lower rail rates and improvements in service time and reliability during the first decade of deregulation, and that shippers continue to benefit from lower rates. The authors also found that increased rail-to-rail competition had no impact on changes in service reliability or average service time.

In its April 1999 report entitled *Railroad Regulation: Changes in Railroad Rates and Service Quality Since 1990,* the U.S. General Accounting Office concluded that "railroad rates have generally fallen both overall as well as for specific commodities" since 1990. GAO noted that its results are consistent with Surface Transportation Board (STB) calculations that found that average rail rates fell 4.1 percent annually in real terms from 1990 to 1996, and that rate reductions vary by commodity.

In a series of late 1998 staff papers, economists at North Dakota State University studied the behavior of grain rates in recent years. They noted that "while rate increases have been a major concern for shippers, most of these concerns have been unfounded. In fact, several studies have indicated that as a result of deregulation, cost savings have accrued and rail rates have fallen in real terms." The researchers also found that "[I]n the period prior to the [Staggers Rail Act], most rail rates were generally increasing in real terms. However, in the period following [Staggers], most rail rates decreased in real terms by 52 percent (ranging from 40–71 percent across commodities)."

And when viewed from a global perspective, U.S. freight railroads stand unequaled. The World Bank's Railways Adviser recently stated that, "Because of a marketbased approach involving minimal government intervention, today's U.S. freight railroads add up to a network that, comparing the total cost to shippers and taxpayers, gives the world's most cost-effective rail freight service. Unsubsidized U.S. freight rail rates are not only the lowest of any market economy, they have been falling every year since 1980, even though U.S. labor costs are high."

RAILROAD INVESTMENT

There was little doubt at the time of the Staggers Act that inadequate investment by the nation's railroads had been a major factor contributing to their poor financial health and unsatisfactory service. As Congress explained, "The simple fact of the matter is that the railroad industry is a capital-intensive industry which for decades has had inadequate earnings to maintain its plant and facilities at a level necessary to achieve improved services." Indeed, in 1980, Congress acknowledged the enor-

mous capital shortfall ($16 to $20 billion by 1985) of the railroad industry, even after billions of dollars of Federal funding had flowed into the bankrupt Northeastern railroads.

Railroading is a capital intensive business: large capital expenditures are needed to maintain plant and equipment, to upgrade facilities as technology and markets change, and to expand capacity. Moreover, the amount of capital required to sustain the railroad industry is extremely high compared to American industry, in general, and among the railroad industry's most prominent competitors.

As shown in the table below, data for Fortune 500 firms in selected industries that are major rail shippers or competitors reveal that on the basis of total assets required per dollar of revenue produced, railroads have significantly higher asset needs—$2.57 of assets for each dollar of revenue produced. The 15 chemical companies among the Fortune 500, for instance, have only $1.42 in assets for each dollar of revenue produced and the 37 utilities average only $2.23 in assets, while the two trucking firms average only 50 cents in assets per dollar of revenue. In aggregate, the 127 industrial firms in the sectors listed had, on average, $1.46 in assets per dollar in revenue—just 57 percent of the railroad figure.

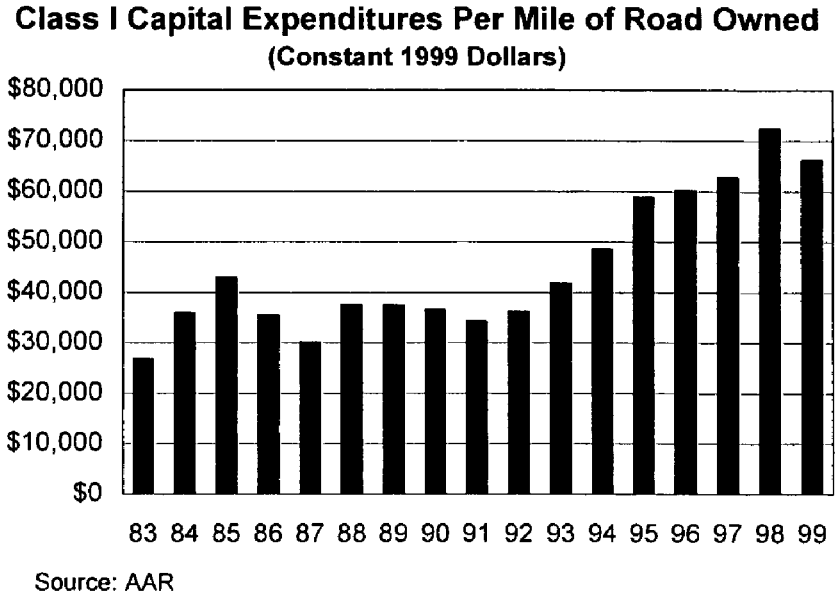
RATIO OF ASSETS TO REVENUES

[Dollars in billions]

Industry	Number of Firms	Total Revenues	Total Assetsa	Ratio of Assets to Revenues
Chemicals	15	$114.4	$162.1	1.42
Food	22	178.6	116.2	0.65
Forest & Paper Products	11	106.3	134.0	1.26
Industrial & Farm Equipment	11	81.2	88.3	1.09
Metals	8	44.2	54.6	1.24
Mining, Crude Oil Production	3	17.0	24.6	1.45
Motor Vehicles & Parts	14	452.8	634.6	1.40
Railroads	4	36.4	93.6	2.57
Trucking	2	8.8	4.4	0.50
Gas & Electric Utilities	37	266.3	594.8	2.23
Total	127	1,306.0	1,907.2	1.46

Source: Fortune, April 17, 2000 pp. F1–F20.

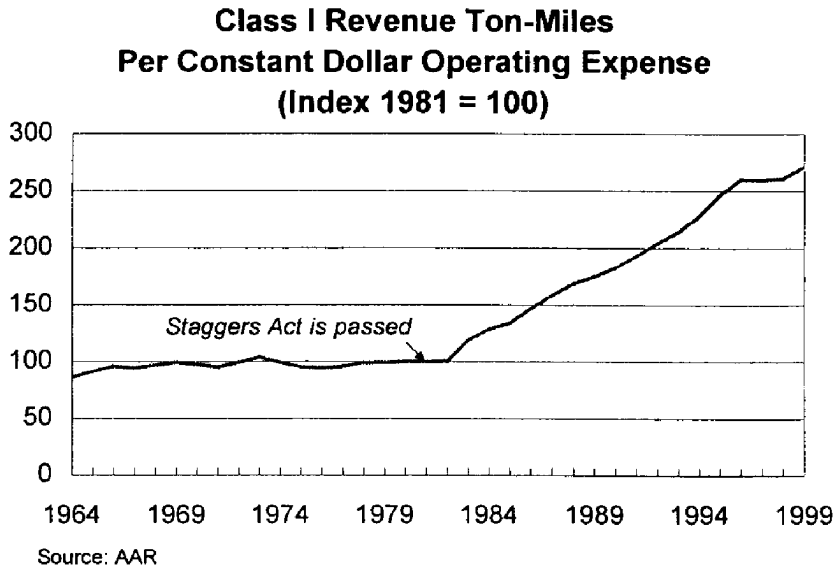
Prior to Staggers, the inadequacy of capital expenditures fed upon itself—lower investment led to lower quality service, which led to a decline in traffic volume and lower revenues that made further investment impossible. In contrast, deregulation under the Staggers Act has been highly successful in promoting reinvestment in railroad infrastructure. Even as railroads have shed unproductive assets, they have invested in new productive assets. Capital expenditures per mile of road owned were more than $66,000 in 1999, almost two and a half times the comparable inflation-adjusted 1983 figure. Overall, new capital investment in roadway, structures and equipment by the nation's Class I railroads in 1999 alone was over $6.6 billion (nearly 20 percent of rail industry revenue) with an additional $12.9 billion in maintenance expenses related to roadway, structures and equipment expenditures. After accounting for depreciation, railroads spent $16.2 billion in 1999 alone on their infrastructure and equipment. This extraordinary level of funding—equal to 48 percent of industry operating revenues in 1999—is required year after year to provide the high quality assets necessary for the rail industry to operate efficiently, and has made the nation's railroads stronger and more effective competitors. Importantly, unlike other transportation modes, railroads rely on private financing, not government funds, to pay for their infrastructure investments. In fact, if the funds railroads spent on their infrastructure in 1999 were raised through a fuel tax, railroads would have had to pay approximately $2.04 per gallon—an amount equivalent to four to ten times the tax paid by competing modes.



RAILROAD PRODUCTIVITY

These investments have contributed to dramatic improvements in railroad productivity. According to the U.S. Bureau of Labor Statistics, railroad productivity has exceeded that of nearly every other U.S. industry. Revenue ton-miles per constant dollar of operating expense is a useful overall productivity gauge. By this measure, which incorporates all cost components that contribute to rail operations, overall rail productivity rose 171 percent in the post-Staggers period, compared to just 10 percent in the comparable pre-Staggers period.

Since Staggers, nearly every rail input has seen enormous productivity gains. From 1981–1999, rail labor productivity rose 287 percent, locomotive productivity rose 113 percent, track productivity rose 130 percent, freight car productivity rose 92 percent, and fuel efficiency rose 58 percent. In each case, post-Staggers productivity improvements were far greater (usually two to three times higher) than during the comparable pre-Staggers period.



RAILROAD PROFITABILITY

Rail profitability has improved to moderate levels since deregulation. Even with their improvements, though, railroad earnings are still not sufficient to cover all costs of rail operations and generate an adequate return on investment. Until it earns its cost of capital on a consistent basis, the long-term viability of the rail industry will continue to be threatened.

Return on equity (ROE) is a commonly used indicator of short-term profitability. According to Fortune 500 data, in the 15 years from 1985 to 1999, overall railroad ROE was less than the Fortune 500 average each year; in all but three years, the railroad ROE was in the lowest quartile; and in eight of the 15 years, 92 percent or more of other industries generated returns that exceeded those of the railroads. Standard & Poor's data show similar results: nearly three-fourths of the time, railroad ROE is lower than the ROE for a variety of industries that are major rail shippers. In most cases, railroad ROE is strikingly lower.

Artificial and unrealistic restrictions that impede a railroad's opportunity to generate sufficient returns are likely to severely compromise the carrier's ability to retain and attract the capital it needs to sustain its investment and operations over the long term. Access to capital is more important than ever to the railroad industry for two reasons. First, the railroads were able to increase their profitability since Staggers in the face of strong competition from trucks and declining rates only through increased productivity. Those productivity gains, however, were achieved through measures that have largely been exhausted or through one-time events—as some have put it, by harvesting the "low-hanging fruit." Future productivity gains will likely need to be "purchased" with additional, large-scale strategic infrastructure investments.

Second, new investment is also needed to meet increasing shipper demand for transportation service. Rail traffic as measured by revenue ton-miles has increased by 57 percent since 1980. Part of this growth has been fueled by the increasing globalization of commerce and the resulting increase in demand for high-volume, long-haul transportation that is well suited to railroads. The railroad industry has reached the point where further significant traffic growth will not be possible without investments that expand capacity.

Increasing demand for transportation is having an effect on all aspects of the nation's transportation system, not just the railroads. Trucks, which still dominate the surface transportation of freight, face capacity constraints of their own. Driver shortages persist and there continues to be political debate surrounding the public funding of increased highway capacity. The nation's port facilities also are finding themselves increasingly pressed for funds to accommodate an explosion in intermodal cargo traffic. It is clear that transportation capacity will have to increase as

the economy expands. The railroads can contribute to meeting these increased capacity needs through private capital—unlike motor carriers that rely on public funding of highway construction and expansion—but only if the regulatory structure gives the railroads an incentive to make the necessary investments. In order to promote necessary investment in infrastructure, railroads must have the opportunity to earn competitive returns and to that end they need the pricing flexibility afforded by the present regulatory system.

CUSTOMER SERVICE

Railroads are taking action to improve their service. They have spent heavily on infrastructure ($140 billion in the 1990s alone, paid for with private funds, not funds appropriated by this Committee). In addition, railroads have entered into agreements with two major customer groups—the National Grain and Feed Association and the National Mining Association. The agreements entail voluntary, private-sector efforts to solve problems by working together. The parties involved all recognize that private sector solutions are preferable to government intervention.

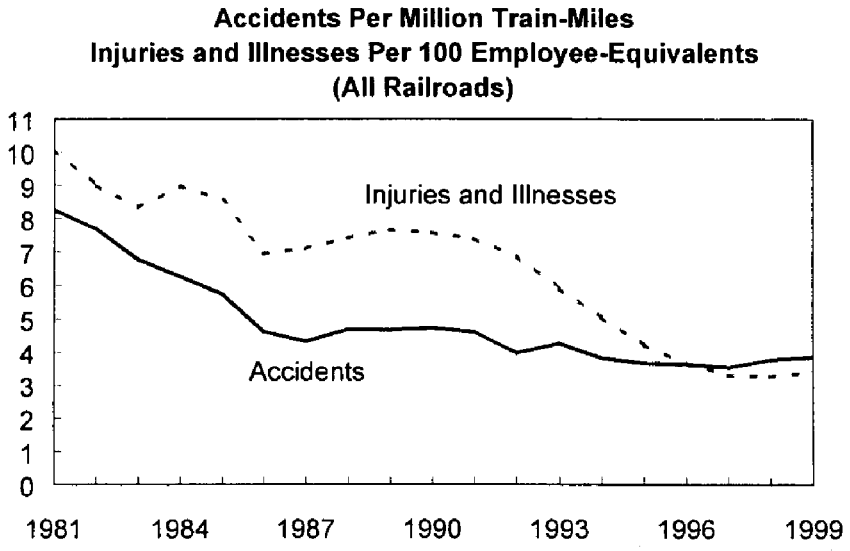
In January 1999, freight railroads became the first industry to publish weekly performance measures, giving customers access to updated information on location-specific performance measures that serve as indicators of how well traffic is moving through a railroad's system.

There are also several other initiatives underway. One is the "Chicago Plan." Last spring, under the auspices of the Association of American Railroads, freight railroads convened an industry-wide planning group to address service reliability in Chicago, the most important rail hub. The freight railroads have also initiated a long list of technological programs to enhance customer service and performance, including Automatic Equipment Identification, Interline Service Management, and NetREDI—an Internet service—to provide an easy way for customers to track their shipments. Railroads are also aggressively pursuing opportunities involving e-commerce to help make customer interaction with railroads more efficient and beneficial.

While every American has benefited enormously from the efficiencies, cost savings and rate reductions brought about by rail deregulation, railroads are committed to continual improvement to the benefit of their customers and the economy.

SAFETY

Another critical benefit of the deregulatory era has been a pronounced increase in safety. The chart below illustrates the extraordinary railroad safety achievements resulting from an emphasis on safety management and from safety-related investments. Accidents per million train-miles have been driven down 53 percent from 1981–1999, while injuries and illnesses per hundred employees (per year) have been forced down by 66 percent. The past five years have been the safest in the industry's history. Rail industry employee injury rates are lower than employee casualty rates of workers in factories, mines and even some retail industries, and lower than rates in the truck, transit and aviation industries.



Source: Federal Railroad Administration

All of us want to see these safety improvements continue. One way to jeopardize them, however, would be to limit the ability of railroads to earn enough to cover the costs of their systems. In the 1970s, oppressive regulation prevented railroads from doing just that. One consequence of that unfortunate reality was billions of dollars of deferred maintenance, a problem that took the railroads years to overcome. Railroads, their employees, and the communities they serve cannot afford a return to a time when insufficient earnings brought about by misguided regulation prevented railroads from dedicating the necessary resources to maintain their world-best standards.

EXISTING REMEDIES

Most shippers have multiple competitive options in today's transportation market that effectively constrain or discipline rail prices. But in those instances where genuine competitive issues exist, Congress has provided and the Board has implemented effective remedies to protect shippers from abuse of market power or anti-competitive behavior.

Remedies for unreasonably high rates are available if it can be shown that there is no effective competition to constrain rail rates—i.e., where the challenged rate exceeds the statutory jurisdictional threshold (currently 180 percent of variable costs) and where the railroad does not face effective competition for the issue traffic. Upon finding a rate unreasonably high, the Board is authorized to award reparations and/or to prescribe maximum reasonable rates for the future. To determine the reasonableness of a rate, the STB uses a "stand-alone cost" (SAC) test, which applies the principles of demand-based differential pricing to cap rail rates at the level that would be charged by a hypothetical "stand-alone railroad" providing head-to-head rail competition for the traffic at issue.

In enacting the ICC Termination Act, Congress responded to shipper concerns over the length and complexity of rate reasonableness proceedings. To expedite relief, Congress mandated that rate cases be completed within 16 months, and the STB has implemented simplified guidelines and procedures to speed up handling of certain cases. Recognizing that there is still dissatisfaction among some small rail shippers, the rail industry has recommended several modifications to existing regulatory procedures to further streamline the process.

PROPOSALS TO REREGULATE RAILROADS

Despite the existence of remedies for any actual abuse of railroad market power and the vital role railroads play in the nation's economy, some groups seek to reinstate pervasive economic regulation of the railroads. These groups call for jetti-

soning the deregulatory system that has served the nation well and replacing it with a system in which regulators would again have ultimate authority over important facets of rail operations. You won't hear these groups calling their proposals "reregulation," of course, but that is precisely what it is. Their proposals are not new thinking: they have been periodically advocated, and rejected by Congress, for good reason, in the past.

The end result of most proposals to reregulate railroads is the same: they would have the government force railroads to lower their rates to certain favored shippers—at the expense of other rail shippers, rail investors and the public at large. And if those groups advocating reregulation had their way, the government would take such action without requiring any showing of anti-competitive conduct by railroads, without showing that railroads had actually abused their market power, without showing that railroad profits are excessive, and without any opportunity for railroads to cover their costs or make the heavy investments necessary to maintain their systems.

THE DANGERS OF RAIL REREGULATION

Proposals to reregulate the railroads primarily focus on artificially manufacturing rail-to-rail competition. As noted earlier, however, railroads already face extensive competition for the vast majority of their business, including cases where a shipper or receiver is served by only one railroad. Moreover, the present level of rail-to-rail competition reflects private sector decisions as to which markets will sustain more than one railroad and which will not. Stated another way, it is not economically feasible for there to be two railroads serving every shipper because that level of competition is not sustainable. Trying to mandate more rail-to-rail competition than the marketplace will support would reduce competition, not enhance it, because it would prevent railroads from covering the full cost of providing service across their systems.

This is so because of the cost and demand characteristics railroads face. On the cost side, railroads have extremely high fixed costs (e.g., the track structure and related facilities) that must be covered regardless of traffic level. On the demand side, rail shippers differ widely in terms of their willingness to pay for rail service. On one extreme, some rail traffic can easily shift to truck or other alternatives, and would do so if railroads charged much over their variable cost of moving that traffic. On the other extreme, some rail traffic is less easily diverted to other modes and has fewer competitive alternatives; this traffic can be charged higher markups to reflect the attendant higher demand for rail service.

Given this demand structure, railroads would lose customers if they were required to charge all traffic the same markup over variable costs. Instead, railroads price their services on the basis of demand, with those shippers with the greatest demand for rail service paying higher markups than shippers with lower demand. This way, railroads cover their variable costs and realize varying contributions to fixed costs from various customers.

This kind of "differential pricing" is practiced by businesses in every segment of the economy, from auto dealers (expensive cars carry higher margins) and airlines (a business traveler who buys a ticket at the last minute pays more than a vacationer who buys a ticket in advance) to movie theaters (matinees are cheaper than evening shows) and utilities (industrial users pay lower rates than homeowners). The Staggers Act explicitly recognizes differential pricing as essential to the rail industry's financial viability.

Differential pricing benefit all shippers because lower rates to some shippers generate revenue (which helps to cover fixed costs) which otherwise would not be realized. Indeed, given their demand structure, only by pricing in accordance with demand (with reasonable regulatory ceilings on maximum rates) can railroads efficiently recover all of their costs, serve the largest number of rail customers, and maintain the viability of the nation's rail system.

Unfortunately, proposals to reregulate the railroads would gut the use of differential pricing by railroads. Manufactured rail-to-rail competition would artificially drive down rail rates toward variable cost. There would no longer be a sufficient mix of high demand-high margin and low demand-low margin traffic to enable railroads to earn the total markups they need to cover their full costs. Specifically, the aforementioned AEI/Brookings study found that artificially manufactured rail competition would result in a drain to the railroads of $1.3 billion annually. The study also concluded that this huge loss of revenue to the railroads would provide no benefit to the economy, since it would merely be a transfer from railroads to rail customers. Rail industry analysis of specific reregulation proposals has revealed that more than $2.4 billion annually in railroad revenue would be lost. Because the rev-

enue loss would not be accompanied by compensating reductions in expenses, most or all of the industry's net income would disappear. Railroads would have to cut their costs by shrinking the size and/or the quality of their rail networks. Such an outcome is completely at odds with the needs of our growing economy and America's global competitiveness.

RAILROADS DO NOT HAVE EXCESSIVE MARKET POWER

The call for greater rail regulation relies on the false assumption that railroads have undue market power. Real-world evidence proves otherwise:

—*Prices*.—The exercise of market power rarely involves sharply lower prices. Rail revenue per ton-mile has actually fallen substantially—by 28 percent in nominal terms and 57 percent in inflation-adjusted terms—from 1981 to 1999.

—*Costs*.—If railroads had excessive market power, incentives to reduce costs and use productive inputs efficiently would be suppressed. Yet, according to the Bureau of Labor Statistics, rail productivity gains in the past decade are among the very highest in all of American industry, and rail costs per unit of traffic have plunged.

—*Innovation*.—If railroads had excessive market power, they would have reduced incentives to invest in innovative products and processes. But unit trains, double-stacking intermodal freight cars, grain car reservation systems, AC locomotives, modern dispatching centers, improved safety equipment, e-commerce, and a variety of other innovations attest to the railroads' competitive incentives.

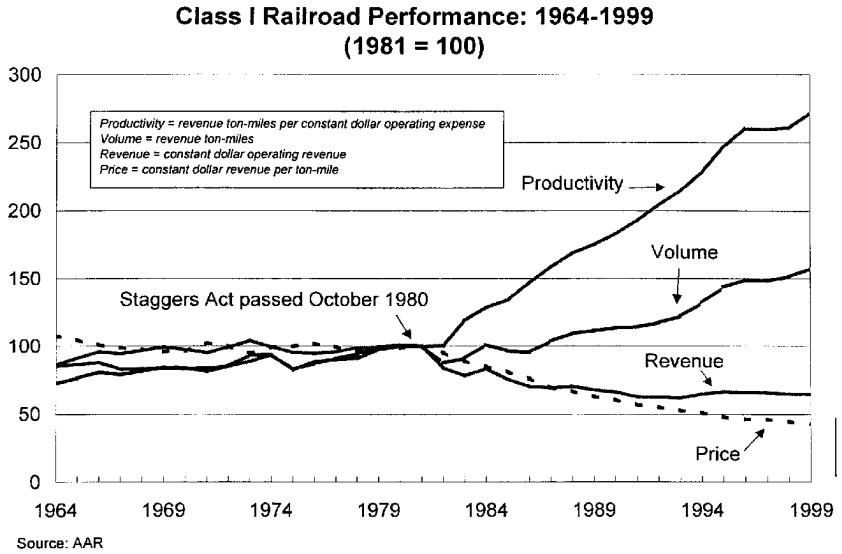
—*Profits*.—If railroads had excessive market power, they would be able to earn more than a competitive rate of return. In fact, railroads consistently fail to earn their cost of capital and rail profitability ranks in the bottom quartile among all U.S. industries.

—*Market Share*.—If railroads had excessive market power, they would not have steadily lost market share for decades. The ongoing struggle by railroads to retain the meager market share gains they have made over the past ten years is stark evidence of the intensity of the competition they face from other modes. For example, only about 15 percent of total U.S. electricity generation is accounted for by coal-fired plants served just by a single railroad. Likewise, U.S. Department of Agriculture data indicate that trucks have supplanted railroads as the primary transportation mode for grain. And the chemical industry's own figures show that railroads account for just 20 percent of chemical transportation tonnage.

CONCLUSION

The railroad industry is committed to sincere and productive participation in regulatory and private sector initiatives concerned with service, safety, and other areas of rail operations. The current regulatory regime balances competition with regulation in a way that protects shippers from abuse, while allowing railroads to stand or fall based on their response to the competitive pressures of the free market. The chart below demonstrates the tremendous gains railroads have made under the current regulatory regime. Unfortunately, many of the proposals to reregulate the rail industry would replace the current system with one in which regulation would be far more costly and far less effective.

In summary, the economic reality is that the railroad industry faces pervasive competition in the transportation marketplace and that the current regulatory structure has allowed the railroads to remain viable in that marketplace. Going forward, railroads need the continued flexibility that deregulation has offered in order to efficiently handle the future transportation needs of our growing economy and sustain our nation's international competitiveness.



STATEMENT OF FRANK K. TURNER, PRESIDENT, AMERICAN SHORT LINE AND REGIONAL RAILROAD ASSOCIATION

Senator SHELBY. Mr. Turner.

Mr. TURNER. Thank you, Mr. Chairman. My name is Frank K. Turner. I am President of the American Short Line and Regional Railroad Association. I certainly appreciate the opportunity to testify at this hearing today.

SHORT LINE MEMBERS

I am here today representing short line members, more than 400 short line and regional railroad members located in every state of the United States. Mr. Chairman, 13 members of your subcommittee have between them 138 short line railroads operating almost 10,000 miles of track. The majority of this track is in rural areas where rail service could have been abandoned by class one railroads if short line operators had not purchased these lines.

In your own State of Alabama, Mr. Chairman, there are 17 short line railroads operating over 500 miles of track. Without these companies, 16 cities, from Florence, in northeastern Alabama, to Beatrice, in southwestern Alabama, would lose the only rail service they have. Small railroads can serve their shippers best in a competitive rail environment. We are an essential part of the national rail network.

Short line and regional railroads, and the shippers and communities that depend on them for service, are deeply affected by the ongoing restructuring of the North American railroad industry. Class one railroads have consolidated aggressively since the Staggers Act. Only six large class one railroads remain in North America today, down from more than 40 class one railroads in 1980. The number of competitors has been reduced and so has the number of competitive options.

This is troubling, because the fundamental premise of the Staggers Act, as has been pointed out, was meaningful competition. When the industry reaches the point that most shippers have only one choice of a rail company to deal with, that fundamental premise of the Staggers Act becomes questionable. Small railroads can and should be a part of the way to enhance railroad competition in America. If small railroads can move certain traffic more efficient than class one railroads, then the system should allow it.

If small railroads can ease congestion on overcrowded class one mainlines, the system should allow it. If small railroads can take truck traffic off of the highways, then the system should allow it. More often than not, the system does not allow it.

SERVICE

Another critical issue is service, which has been pointed out. Services suffered in the aftermath of recent mergers. Small railroads simply cannot deliver good service to their customers if they don't get good service from their connections. The Service Transportation Board is considerably considering changing the rules that govern class one rail mergers. The Short Line Association has urged the board to add new conditions, with teeth in them, to preserve competitive options and ensure good service for small railroads affected by a proposed class one merger.

SHORT LINE AND REGIONAL BILL OF RIGHTS

The Short Line Association has proposed a short line and regional railroad bill of rights, and urge the board to include it as a condition of board approval of any future class one merger or consolidation transaction.

The short line and regional railroad's bill of rights is as follows: One, the right to compensation for service failures; second, the right to interchange and routing freedom; third, the right to competitive and non-discriminatory pricing; and fourth, the right to fair and non-discriminatory car supply. I have attached a copy of this, of our filing, and the STB proceedings to my testimony for the record.

We are hopeful that it will require the kind of actions that we have outlined in our bill of rights. However, the board's new rules will apply only if there are more class one railroad mergers in the future. Unfortunately, the small railroads have competitive and service problems with their class one partners today, which the board's new merger rules will not affect.

We have tried to address these issues through industry-wide negotiations. The process began 2 years ago with encouragement from the STB under Chairman Linda Morgan's leadership. On September 10, 1998, we signed the Railroad Industrial Agreement between the short line and regional railroads, and class ones. The RIA, as it is known, contains provisions that are intended to address a wide range of rate and service issues.

TRACKAGE RIGHTS AND HAULAGE RIGHTS

Two key provisions allow small railroads to gain access to new trackage rights or haulage rights agreements under certain cir-

cumstances or to get paper barriers set aside to develop new business. The RIA was a milestone 2 years ago. It was the first privately negotiated industrial-wide agreement for railroads, and it tried to address some of the critical issues.

Unfortunately, so far, the results have been rather disappointing. There have been far fewer success stories than I had hoped. My short line members tell me most of their ideas are either met by silence or delay. Although, progress has been slow, we do not want to abandon private negotiations. Chairman Morgan recently wrote to Mr. Ed Hamberger and myself requesting an update on how the RIA is working, and urging the railroads to consider whether changes are needed. In fact, representatives of the Short Line Association and class one railroads are sitting down this Thursday to do just that.

The small railroads are going to raise their concerns that the RIA is not working as it was intended, and it needs to be strengthened and be expanded. I hope the class one railroad's representatives will be receptive to this. We will be reporting back to Chairman Morgan in October. If no progress has been made, we will seek a more regulatory solution.

FUNDING TO MAINTAIN AND UPGRADE FACILITIES

Another huge issue for small railroads is the problem of finding funding to maintain and upgrade our facilities. We are often playing a catchup on light-density lines after years of deferred maintenance. The class one's new generation of heavier capacity freight cars, now built to 286,000 weight standards, require upgrade of "R" track, ties, ballasts, and bridges.

A new study by Zeta-Tech Associates established a need of $6.8 billion for small railroads to upgrade their track and facilities to handle these new heavier 286,000-pound freight cars. I have attached a copy of the Zeta-Tech study conclusions to my testimony for the record.

Class one railroads received almost all the productivity savings generated by the new 286 cars. The benefits come from huge volumes that allow class ones to run fewer trains, thus reducing fuel costs and locomotive costs. Short lines typically receive and move the 286 cars in single car lots, not unit trains. We get the burden, but not the benefit.

Congressman Spencer Bacchus has introduced a bill to the House of Representatives to deal with this problem. HR–4746 will take the 4.3 cents per gallon tax railroads currently pay on diesel fuel, a holdover from the days of deficit reduction, and use it to fund small railroad infrastructure upgrades until the tax is repealed.

Based on the huge needs identified by the Zeta-Tech study, this seems to be a very appropriate use for the funds that are currently being paid into the general funds by the railroads, but provide no benefit to the railroad infrastructure. The Bacchus bill will provide much needed infrastructure help for small railroads. This would help them be more competitive and provide better service for our shippers.

PREPARED STATEMENT

In conclusion, short line and regional railroads have serious concerns about competition and service in the railroad industry. We are trying to address these through industry-wide negotiations with our class one partners, and through the rule-making procedures at the Surface Transportation Board. We hope our negotiations are successful, and we hope the STB makes the kind of changes that let short lines enhance competition and solve network service problems. If we are not successful in these arenas, we will look to Congress for more meaningful action. Thank you, sir.

[The statement follows:]

PREPARED STATEMENT OF FRANK K. TURNER

Chairman Shelby, and members of the Subcommittee, I am Frank K. Turner, President of the American Short Line and Regional Railroad Association. I appreciate the opportunity to testify at this hearing on issues related to freight rail competition and the Surface Transportation Board's response to these issues.

I am here today representing ASLRRA's members—more than 400 short line and regional railroads located in every state in the U.S. Short line and regional railroads are an important part of the rail network. Today we own, maintain and operate 29 percent of the railroad track in the U.S.—almost 50,000 miles of track. We employ 11 percent of the rail workforce and receive 9 percent of rail freight revenue. The number of short line and regional railroads in this country has more than doubled since the Staggers Rail Act of 1980.

Just to put our position in perspective, Mr. Chairman, the 13 Members of your Subcommittee have between them 138 short line railroads operating almost 10,000 miles of track. The majority of this track is in rural areas where rail service would have been abandoned by the Class I railroads if short line operators had not purchased these lines.

In your own state of Alabama, Mr. Chairman, there are 17 short line railroads operating 540 miles of track. Absent these companies, 16 cities from Florence in northeastern Alabama to Beatrice in southwestern Alabama would lose the only rail service they have.

Small railroads can serve their shippers best in a competitive rail environment. We are an essential part of the national rail network. Small railroads originate or terminate roughly one quarter of the total carloads that move over the larger Class I rail systems. Many of the lines we operate are light density lines at the fringes of the network. In many cases these were branch lines that were candidates for abandonment by their former Class I owner. Rail service was preserved when these lines were sold to a new short line operator. By keeping these lines alive, we have kept shippers connected to the national rail network. Many of these lines serve rural areas.

Short line and regional railroads, and the shippers and communities that depend on them for service, are deeply affected by the ongoing restructuring of the North American railroad industry. The Class I railroads have consolidated aggressively since the Staggers Act. Only six large Class I railroads remain in North America today, down from more than 40 Class I railroads in 1980. As the number of competitors has been reduced, so have the number of competitive options.

This is troubling, because a fundamental premise of the Staggers Act was that meaningful competition was supposed to take the place of regulation. This approach works only so long as a competitive rail transportation marketplace actually does exist and function. That requires competitive options and alternative routes and meaningful choices between rate offerings and service providers. When the rail industry reaches the point that most shippers have only one choice of rail company to deal with, that fundamental premise of the Staggers Act becomes questionable.

Small railroads can and should be a part of the way we enhance railroad competition in America. If individual small railroads can move certain traffic more efficiently than the Class I's then the system should allow it. If individual small railroads can ease congestion on overcrowded Class I main lines then the system should allow it. If individual small railroads can take truckload traffic off the highways then the system should allow it.

More often than not, the system does not allow it. This is not only bad for competition and bad for service, but it does not make sense economically. At the end of the day, the Class I main lines handle the overwhelming majority of all the traffic

generated by the short lines. To take that traffic 100 miles out of its way on its own line so as to squeeze out an incremental piece of revenue does not make economic sense. That 100-mile diversion means that some existing traffic will be lost to more efficient truckers and virtually no new traffic will be won back to the rails. The railroads' market share has been stuck in the mid-thirty percent range for many years and will be stuck there for many years to come if it sticks to these same practices.

Another critical issue is service. Service has suffered in the aftermath of the recent mergers. Most of the freight that originates or terminates on small railroads must be interchanged with a Class I railroad in the course of its journey. Small railroads simply cannot deliver good service to their customers if they don't get good service from their connections.

The Surface Transportation Board is currently considering changing its rules that govern Class I rail mergers. In that proceeding, ASLRRA has urged the Board to add new conditions, with teeth in them, to affirmatively preserve competitive options and ensure good service for small railroads affected by a proposed Class I merger. ASLRRA has proposed a "Short Line and Regional Railroad Bill of Rights," and urged the Board to include it as a condition of Board approval of any future Class I merger or consolidation transaction.

The "Short Line and Regional Railroad Bill of Rights" conditions deal with issues of service, interchange and routing, pricing, and car supply. To give a very quick overview, they provide that, in the merger context, small railroads should have: 1. The right to compensation for service failures; 2. The right to interchange and routing freedom; 3. The right to competitive and nondiscriminatory pricing; and 4. The right to fair and nondiscriminatory car supply.

I have attached a copy of ASLRRA's filing in STB Ex Parte No. 582 (Sub-No. 1) to my testimony, for the record. It contains more detail on the conditions we are requesting and the language of the rule changes we have asked the Board to consider.

The Board's new merger rules can go a long way toward addressing the serious competitive and service issues that small railroads face. The Board will release its proposed rule in October, and we are hopeful the proposed rule will require the kind of actions we have outlined in our "Bill of Rights."

That is just part of the puzzle, however, because the Board's new rules will apply only if there are more Class I rail mergers in the future. Unfortunately, however, the small railroads have competitive and service problems with their Class I partners today, which the Board's new merger rules won't affect.

We have tried to address these important issues through private, industry-wide negotiations. This process began two years ago, with encouragement from the Surface Transportation Board under Chairman Linda Morgan's leadership. On September 10, 1998, the ASLRRA and AAR signed the Railroad Industry Agreement between the short line and regional railroads and the Class I's. The RIA contains provisions that are intended to address a wide range of rate and service issues. Two key provisions allow small railroads to gain access to new trackage rights or haulage agreements under certain circumstances, or to get "paper barriers" set aside, to develop new business. The RIA was a milestone two years ago. It was the first privately negotiated, industry-wide agreement for railroads, and it tried to address some critical issues. Unfortunately, results so far have been rather disappointing. There have been far fewer success stories than I had hoped. My short line members tell me that most of their ideas are met by either silence or delay, and that by the time the few deals that have been done are completed the potential traffic has often long since moved to another mode.

Although progress has been almost nonexistent, we do not want to abandon private negotiations. Chairman Morgan has recently written a letter to Ed Hamberger and myself, requesting an update on how the RIA is working, and urging the railroads to sit down to discuss if changes are needed. In fact, representatives of ASLRRA and the Class I railroads are sitting down this Thursday to do just that. The small railroads are going to raise their concerns that the RIA is not working as it was intended to, and that it needs to be strengthened and perhaps expanded. I hope we will find the Class I railroad representatives receptive to our concerns. We will be reporting back to Chairman Morgan in October. If no progress has been made toward addressing our competitive and service concerns in the negotiations, we may need to seek a more regulatory solution.

Another huge issue for small railroads, which affects our ability to provide efficient and competitive service, is the problem of finding sufficient funding to maintain and upgrade our lines and facilities. We are often playing "catch-up" on our light density lines after years of deferred maintenance. The Class I's new generation of heavier, higher capacity freight cars, now built to a 286,000-lb. weight standard,

require upgrade of our track, ties, ballast and bridges. A new study by ZETA–TECH Associates, Inc. established a need of $6.8 billion for small railroads to upgrade their track and facilities to handle these new, heavier 286,000-lb. freight cars. I have attached a copy of the ZETA–TECH study's conclusions to my testimony, for the record.

Two important points need to be stressed. First, the Class I railroads receive all the productivity savings generated by the new 286 cars. These benefits derive from huge volumes that allow the Class I's to run fewer trains, thus reducing fuel costs, labor costs and locomotive costs. The short lines typically receive and move freight in carloads, not in 100-car unit trains. Yet the cost to upgrade their track to handle these cars is no less expensive.

Second, while this is a one-time fix for small railroads, it is one that becomes increasingly expensive to fix the longer it is ignored. Left unrehabilitated, these lines will gradually lose their business as their shippers are forced to move to truck or to new locations on Class I railroads. Once that occurs, these lines will deteriorate and ultimately be abandoned and no amount of Federal funding will be able to bring them back.

Recognizing the need for action now, Congressman Spencer Bachus has introduced a bill in the House of Representatives to deal with this problem. H.R. 4746 would take the 4.3 cents per gallon tax that railroads currently pay on their diesel fuel, a hold-over from the days of deficit reduction, and use it to fund small railroad infrastructure upgrades until such time as that tax is repealed by Congress. Based on the huge needs identified by the ZETA–TECH study, this seems like a very appropriate use for funds that currently are being paid into the general fund by railroads and yet provide no benefit to the railroad industry. The Bachus bill would provide much-needed infrastructure help for small railroads. This in turn would help them be more competitive and provide better service for their shippers.

In conclusion, the short line and regional railroads have serious concerns about competition and service in the railroad industry. We are trying to address these through industry-wide negotiations with our Class I partners, and through the rule making procedure at the Surface Transportation Board. We hope our negotiations are successful, and we hope the STB makes the kind of changes that let short line railroads enhance competition and solve network service problems. If we are not successful in these arenas we will look to the Congress for more meaningful action.

Thank you.

ATTACHMENT 1

COMMENTS OF THE AMERICAN SHORT LINE AND REGIONAL RAILROAD ASSOCIATION

The American Short Line and Regional Railroad Association (ASLRRA) is submitting these comments on behalf of its 418 short line and regional railroad members in response to the Advance Notice of Proposed Rulemaking (ANPRM) in the above-captioned proceeding (Decision served March 31, 2000). In that Decision, the Surface Transportation Board (STB or Board) invited comments from interested parties on modifications to its regulations at 49 CFR Part 1180 Subpart A governing proposals for major rail consolidations.

The American Short Line and Regional Railroad Association (ASLRRA) is a nonprofit trade association incorporated in the District of Columbia. ASLRRA represents the interests of its short line and regional railroad members in legislative and regulatory matters. Short line and regional railroads are an important and growing component of the railroad industry. Today, they operate and maintain 29 percent of the American railroad industry's route mileage (approximately 50,000 miles of track), and account for 9 percent of the rail industry's freight revenue and 11 percent of railroad employment.

ASLRRA and its members are interested parties and submit these Comments to suggest changes to the Board's rules governing major rail acquisition transactions. The Board's rules applicable to railroad acquisition, control, merger, consolidation project, trackage rights, and lease procedures are found at 49 CFR Part 1180 Subpart A (49 CFR 1180.0–1180.9). Within the railroad acquisition rules, four types of transactions are defined. The first is major. A major transaction is defined as follows: "A major transaction is a control or merger involving two or more class I railroads." 49 CFR 1180.2(a). The ANPRM deals only with the railroad acquisition rules applicable to major (i.e. class I) acquisition transactions and those are the sole focus of ASLRRA's Comments.

Short line and regional railroads, and the shippers and communities that depend on them for service, are deeply affected by the ongoing restructuring of the North American railroad industry. Since the Staggers Act of 1980 transformed the regu-

latory landscape, the industry has been thoroughly changed by the sale of hundreds of light density branch lines to new operators and a continuing series of class I railroad mergers involving the retained high density main lines. As expressed in ASLRRA President Frank K. Turner's testimony before the Board on March 8, 2000 in the Ex Parte No. 582 public hearing: "In the rail industry, the big have gotten much bigger, while the small have grown greatly in number."

The direction of these changes was clearly consistent with the intent of Congress when it enacted the Staggers Act in 1980. Back then, the industry was struggling to survive after years of stagnation under a heavy-handed regulatory regime. In the late 1970's, over a quarter of the track in the United States was being operated by railroad companies in bankruptcy. Clearly, radical restructuring was needed to increase efficiency, eliminate redundancy and trim excess capacity. That is exactly what happened. In the process, some lines with light traffic density were abandoned while others were sold. The class I railroads consolidated aggressively, to the point that only six large railroads remain in the U.S. and Canada today, down from more than 40 class I railroads in 1980. Gateways were closed, and many joint rates were cancelled in blanket fashion. These changes have led to increased efficiencies, but this progress has come at a price.

Today questions are being raised about whether the pendulum has swung too far. Many short line and regional railroads are concerned that competitive options within the railroad industry have become too restricted.[1] Many shippers share this concern. This is important because a fundamental premise of the Staggers Act was that for U.S. railroads, regulatory restrictions would be lessened or eliminated, but only where meaningful competition existed to discipline rates and service. A competitive transportation marketplace was viewed as a good substitute for regulation. This approach works only so long as that competitive transportation marketplace actually does exist and function. That transportation marketplace requires competitive options and alternative routes and meaningful choices between rate offerings and service providers. When the rail industry reaches the point that most shippers have only one choice of rail company to deal with, that fundamental premise of the Staggers Act no longer works. We are dangerously close to that point.

ASLRRA does not favor re-regulation. The railroad industry has "been there, and done that." History clarifies the very real danger attached to extensive government regulation of our business. We do not want to go back to the "bad old days." That is why it is critically important that competitive options be retained and strengthened.

The Board's rules regarding major railroad mergers are a good place to start. The Board's current rules were put in place by the Board's predecessor agency, the Interstate Commerce Commission (ICC) in 1982, following passage of the Staggers Act. Quite properly, considering the time of their adoption, the rules seem to lean in favor of rail consolidations. The "general policy statement for merger or control of at least two Class I railroads," begins:

"The Surface Transportation Board encourages private industry initiative that leads to the rationalization of the nation's rail facilities and reduction of its excess capacity. One means of accomplishing these ends is rail consolidation." 49 CFR 1180.1 (a).

Later, the current rules discuss public interest considerations, and the balancing test that the Board performs to determine whether a transaction is in the public interest. The potential benefits are described:

"Both the consolidated carrier and the public can benefit from a consolidation if the result is a financially sound competitor better able to provide adequate service on demand. This beneficial result can occur if the consolidated carrier is able to realize operating efficiencies and increased marketing opportunities. Since consolidations can lead to a reduction in redundant facilities and thereby to an increase in traffic density on underused lines, operating efficiencies may be realized. Furthermore, consolidations are the only feasible way for rail carriers to enter many new markets other than by contractual arrangement, such as for joint use of rail facilities or run-through trains. In some markets where there is sufficient existing rail capacity the construction of new rail line is prohibitively expensive and does not represent a feasible means of entry into the market." 49 CFR 1180.1 (c)(1).

The other half of the balancing test equation, the potential harm, is discussed next. The rules describe potential harm in two areas: reduction of competition and

[1] Some ASLRRA-member railroads are participating individually in this rulemaking proceeding. Others probably would have participated individually if they were not fearful of the reaction of their class I connection.

harm to essential services. 49 CFR 1180.1 (c)(2). In both, the rules reflect the Board's (and ICC's) approach of "protecting competition, not competitors."

". . . While the reduction in the number of competitors serving a market is not in itself harmful, a lessening of competition resulting from the elimination of a competitor may be contrary to the public interest . . ." 49 CFR 1180.1(c)(2)(i).

"Consolidations often result in shifts of market patterns. Sometimes the carrier losing its share of the market may not be able to withstand the loss of traffic. In assessing the probable impacts, the Board's concern is the preservation of essential services, not the survival of particular carriers. A service is essential if there is a sufficient public need for the service and adequate alternative transportation is not available." 49 CFR 1180.1(c)(2)(ii).

Finally, the rules discuss conditions. For major rail merger transactions, the statute gives the Board extensive authority to impose conditions, 49 USC 11324(c). The current rules state:

"The Board has broad authority to impose conditions on consolidations, including those that might be useful in ameliorating potential anticompetitive effects of a consolidation. However, the Board recognizes that conditions may lessen the benefits of a consolidation to both the carrier and the public. Therefore, the Board will not normally impose conditions on a consolidation to protect a carrier unless essential services are affected and the condition: (i) is shown to be related to the impact of the consolidation; (ii) is designed to enable shippers to receive adequate service; (iii) would not pose unreasonable operating or other problems for the consolidated carrier; and (iv) would not frustrate the ability of the consolidated carrier to obtain the anticipated public benefits . . ." 49 CFR 1180.1(d)

ASLRRA agrees with the Board's Decision, which states at page 3 that although the current merger regulations were a proper and reasoned response to the serious problems affecting railroads and their customers at that time, the goals of that merger policy have largely been achieved. Today the focus must be on improving service to customers. Rail infrastructure has been pared down to the point that some tracks and yards are congested and straining at capacity. Preserving viable options within the rail industry is imperative to enhance service, sustain competition, allow choices for shippers and avoid reregulation.

New STB class I merger rules can go a long way toward accomplishing this goal. ASLRRA recognizes that there are many different groups of stakeholders and diverse points of view that the Board must balance as it considers this important revision of its Class I merger rules. ASLRRA believes that its suggested changes (below) can be incorporated within the scope of the larger rule changes that the Board will consider. In ASLRRA's view, this will be consistent with the aims of this Ex Parte No. 582 (Sub-No. 1) rulemaking proceeding, and positive for the railroad industry as a whole. That is the spirit in which the following rule changes are suggested.

ASLRRA presented a "Short Line and Regional Railroad Bill of Rights" in Frank Turner's March 8, 2000 Statement (attached). As part of its review of the railroad acquisition rules applicable to major transactions, ASLRRA urges the Board to implement the Bill of Rights by including the following provisions relating to the concerns of small railroads within the new rules it adopts.

The general policy statement for merger or control of at least two class I railroads begins with a general statement at 49 CFR 1180.1(a). ASLRRA suggests that it be redrafted to include the following statement:

49 CFR 1180.1(a)

"The Board places high priority on preserving and enhancing competition within the railroad industry. Small railroads play an important role in feeding traffic to the national rail network and providing service and competitive options for shippers. As the rail network nears capacity in some areas, small railroads can help bypass congested areas to keep freight moving. Small railroads offer capacity for future traffic growth. Their important role in the national rail network should be preserved and their procompetitive role ensured as part of any class I rail consolidation."

In the discussion of public interest considerations for class I merger transactions at 49 CFR 1180.1(c), the following statement should be included:

49 CFR 1180.1(c)

"In determining whether a transaction is in the public interest, the Board performs a balancing test. It weighs the potential benefits to applicants, the railroad network, shippers and the public against the potential harm to the railroad network, shippers and the public. The Board will consider whether the benefits claimed by applicants could be realized by means other than the proposed consolidation that

would result in less potential harm to the railroad network, shippers and the public; and will consider imposition of conditions to lessen such potential harm."

In discussing the potential benefits to be considered at 49 CFR 1180.1(c)(1), the following language should be included:

49 CFR 1180.1(c)(1)

"A consolidation will be considered to benefit the railroad network, shippers and the public only if applicants clearly demonstrate that competition will be enhanced and service will not suffer. Conditions will be imposed to ensure that competition is enhanced and to provide a remedy if service does suffer."

In discussing the other half of the balancing test equation, the potential harm at 49 CFR 1180.1(c)(2) the following should be included:

49 CFR 1180.1(c)(2)

"A consolidation would ill serve the public interest if the result would be harm to competition, restriction or elimination of competitive options within the rail network, or deterioration in service. The Board will impose conditions as necessary to preserve and enhance competition and enforce maintenance of service levels."

The section discussing conditions at 49 CFR 1180.1(d) should specifically include the items of the "Short Line and Regional Railroad Bill of Rights."

49 CFR 1180.1(d)

"The Board has broad authority to impose conditions on consolidations, including those that might be useful in preserving competitive options within the rail network that might be compromised or lessened by the consolidation, and ensuring that adequate service levels will be maintained. The Board recognizes that imposition of conditions may be essential in future consolidations in order to achieve these goals. In regard to ensuring the important role of small railroads within the rail network, the Board will impose the following four conditions unless the applicants demonstrate convincingly that imposition of one or more of these conditions would pose unreasonable operating or other problems for the consolidated carrier and would substantially frustrate the ability of the consolidated carrier to obtain the anticipated public benefits. These conditions will be imposed in order to protect competition, not particular competitors. Therefore, in order to minimize unreasonable burdens on small companies, the Board will impose these conditions presumptively, on its own motion. Class II and class III railroads will not be required to file individual responsive applications and will not be required to pay filing fees in connection with imposition of these conditions.

Conditions for the benefit of class II and class III railroads.—(1) Class II and class III railroads that connect to the consolidated carrier have the right to compensation by the consolidated carrier for service failures related to the consolidation. In addition, when the consolidated carrier cannot provide an acceptable level of service post-transaction, connecting class II and class III railroads should be allowed to perform additional services as necessary to provide acceptable service to shippers.

(2) Class II and class III railroads have the right to interchange and routing freedom. Contractual barriers affecting class II and class III railroads that connect with the consolidated carrier that prohibit or disadvantage full interchange rights, competitive routes and/or rates must be immediately removed by the consolidated carrier, and none imposed in the future. The consolidated carrier must maintain competitive joint rates through existing gateways. Also, class II and class III railroads should be free to interchange with all other carriers in a terminal area without pricing or operational disadvantage. Any pricing or operational restrictions which disadvantage connecting class II or class III railroads must be immediately removed by the consolidated carrier, and none imposed in the future.

(3) Class II and class III railroads that connect to the consolidated carrier have the right to competitive and nondiscriminatory rates and pricing. Rates and pricing of the consolidated carrier that do not meet this standard will be promptly corrected by the consolidated carrier upon request by a connecting class II or class III railroad.

(4) Class II and class III railroads that connect to the consolidated carrier have the right to fair and nondiscriminatory car supply. Car supply issues regarding this standard will be promptly addressed by the consolidated carrier upon request by a connecting class II or class III railroad.

Implementation.—The Board strongly encourages the consolidated carrier to work out any issues regarding these conditions with its connecting class II and class III carriers in a mutually agreeable fashion without resorting to the Board for interpretation or enforcement. However, if needed, the Board will put in place an expedited

and cost-effective remedy process to be initiated by complaint filed with the Board by a connecting class II or class III carrier."

The section of the current rules discussing supporting information to be provided by applicants, 49 CFR 1180.6, should have language added to specifically require that the application filed in a major transaction must include the following information:

49 CFR 1180.6

"The effect of the proposed transaction upon class II and class III carriers that connect with applicants."

The section of the current rules dealing with market analyses, 49 CFR 1180.7, requires applicants to prepare impact analyses in major transactions. This section should have language added to specifically require that the impact analyses prepared and filed by applicants in connection with a major transaction must include the following information:

49 CFR 1180.7

"An impact analysis must include the effect of the proposed transaction upon class II and class III carriers that connect with applicants."

These rule changes, adopted by the Board as part of its revision of the class I merger rules, will be a giant step forward and will put the Board's rules in tune with today's railroading reality. The rail network must affirmatively preserve competitive options and ensure good service in order to remain viable. Small railroads will play an essential part if they are not prevented from doing so. Including the conditions enumerated in the "Short Line and Regional Railroad Bill of Rights" will put a stop to the erosion of competition and service caused by recent mergers. ASLRRA urges the Board to revise its rules to include the changes suggested above, and include the "Short Line and Regional Railroad Bill of Rights" as a condition of its approval of any future class I merger or consolidation transaction.

ATTACHMENT 2

AN ESTIMATION OF THE INVESTMENT IN TRACK AND STRUCTURES NEEDED TO HANDLE 286,000 LB. RAIL CARS

EXECUTIVE SUMMARY

The short line and regional railroad industry in America operates about 50,000 of the 170,000 track miles making up the U.S. railroad network, and accounts for just under $3 billion of the approximately $35 billion in railroad industry gross revenues.

With $3 billion in revenue for 50,000 track miles, the short lines and regionals have only about $60,000 per track mile in annual revenue, compared with an average of $269,000 per mile for large (Class I) railroads in America. Nevertheless, they must maintain a physical plant capable of handling the heaviest freight cars allowed in interchange on North American railroads.

The weight limit for general interchange is in the process of being raised from 263,000 lbs. to 286,000 lbs. The short line and regional railroads have voiced considerable concern about the potential cost of upgrading their fixed plant (track and bridges) to handle cars of this weight. For this reason, the American Short Line and Regional Railroad Association asked ZETA–TECH to estimate the cost to the industry of improving its track and bridges to safely handle heavier cars.

ZETA–TECH surveyed 46 of the 550 short line and regional railroads, with 4,742 miles of track. Detailed information was collected on track and bridge condition, track components, annual tonnage, and operating speed. This information was entered into a database, and ZETA–TECH developed a series of logic matrices to determine when each combination of track components, condition, tonnage, and operating speed was adequate to handle 286,000 lb. cars.

The product of the analysis was an estimate of the total quantity of rail to be replaced, ties to be inserted, ballast to be installed, and bridges to be repaired or replaced, on the 4,742 miles comprising the sample of railroads. These results were then extended to the entire short line industry, to produce the results shown in Table A.

TABLE A.—CALCULATED COST OF UPGRADING SHORT LINE AND REGIONAL RAILROADS TO HANDLE 286,000 LB. CARS

Component	Required investment per mile	Total cost (sample)	Total cost (industry)
Rail	$75,106	$356,150,175	$3,754,182,002
Ties	16,372	77,636,048	818,362,236
Ballast/Surfacing	2,657	12,597,440	132,789,720
Turnouts	7,882	37,377,454	393,996,056
Bridges	35,236	167,085,889	1,761,253,773
Total	137,253	650,847,006	6,860,583,787
Track Mileage		4,742	49,985

PAPER BARRIERS

Senator SHELBY. Mr. Turner, just briefly for the non-railroad people like me, what role specifically do the short line and regional railroads play in our competitive national system? In other words, are the connections, this is where you connect to the main——

Mr. TURNER. Yes. Mr. Chairman, we are a feeder line to the main trunk lines of the national——

Senator SHELBY. Give me an example in my home state, please.

Mr. TURNER. Well, let us say the short line to Alabama and Eastern that runs from Sylacauga, that runs out to Sylacauga, they bring in a lot of limestone and all that, and they deliver it into Birmingham, to CSX, for nationwide service.

Senator SHELBY. Okay. Mr. Hamberger, do you feel that the class one railroads have a vested interest in the health and vitality of smaller railroads, and if so, why?

Mr. HAMBERGER. Absolutely, Mr. Chairman. That is why we sat down and negotiated the deal, the agreement that we did, the Rail Industry Agreement, in September 1998, and why we have had ongoing meetings, both at the CEO level and at the working level, if you will, between the Short Line Regional Rail Association, and the AAR, and our members. We are meeting again Thursday, as Mr. Turner indicated, and it is important because about 10 percent of the overall traffic moves on short-line railroads. Frank represents not just the short line——

Senator SHELBY. This is nationwide, now.

Mr. HAMBERGER. Yes, sir.

Senator SHELBY. Okay. That is a good bit of traffic.

Mr. HAMBERGER. Yes, sir, it is.

Mr. TURNER. Well, you are talking revenue, when you are saying——

Mr. HAMBERGER. Right.

Mr. TURNER [continuing]. But actually more cars than that move over them. About one out of every four or five railroad cars, 20 to 25 percent of every railroad car moves from either—originates or terminates on the short line, but we only get 9 percent of the revenue.

Mr. HAMBERGER. Right. So it is obviously a very important part of being able to maintain service throughout the network, yes.

Senator SHELBY. Mr. Turner, this past spring your organization testified before the Surface Transportation Board and called for what you call a short line and regional railroad bill of rights. You specifically called, or they did, for the end of paper barriers——

Mr. TURNER. That is correct, sir.

Senator SHELBY [continuing]. Which we have talked about here——

Mr. TURNER. Yes.

Senator SHELBY [continuing]. Which restrict short-line railroads' ability to make a choice between competing class one railroads. Explain that.

Mr. TURNER. Well, the first thing, when many of these railroads came into existence as a result of the Staggers Act of the 1980s, these were lines that were secondary main lines, or branch lines that were probably going to be candidates for abandonment, but yet there was still some traffic on them. The railroads wanted to shed themselves of this and go to more of a core operation. So they sold these lines to——

Senator SHELBY. To run to big lines, in other words.

Mr. TURNER. That is right. To the main line.

Senator SHELBY. Sure.

Mr. TURNER. We can go back to somewhere like Sylacauga, or somewhere like that, that they would sell these branch lines, and then allow an operator to take over and develop the traffic, which they have done a great job.

Senator SHELBY. Well, we have a short line railroad in my State, from Meridian, Mississippi, to the paper mill over there at Butler.

Mr. TURNER. Yes, sir. You do. It runs from Meridian to Linden——

Senator SHELBY. That is right.

Mr. TURNER [continuing]. And then on to Myrtle Wood.

Senator SHELBY. That is right.

Mr. TURNER. That was one of our members.

Senator SHELBY. Sure.

Mr. TURNER. That is a little bit different. That was a short line that was owned by the James River Paper Company, and the James River Paper Company decided to get out of the railroad business, so they sold it to an operator. There are no paper barriers. There is some restriction as to delivery of some traffic to some of the interchanges, but that is not a typical short line that was born in the mid-eighties.

Senator SHELBY. How many short line railroads do we have in my State, roughly?

Mr. TURNER. You have 17.

Senator SHELBY. How many do we have nationwide?

Mr. TURNER. We have over 500.

Senator SHELBY. Okay.

Mr. TURNER. Some of these are switching carriers inside of paper plants and things like that, but in your case, there are 17 short lines in your State.

PROBLEMS IN WAKE OF MAJOR MERGERS

Senator SHELBY. Mr. Hamberger, in the wake of the mergers, some of the big recent railroad mergers, there have been some

problems with implementing the Conrail split between CSX and Norfolk Southern. There are several bills pending in both the House and Senate regarding reauthorization of the Surface Transportation Board that detail plans to improve rail competition and service. Is it appropriate, in your opinion, for Congress to take a more active role in these issues, particularly, since some of the rail mergers have created, according to shippers and others, serious problems for themselves and their customers?

Mr. HAMBERGER. Let me say, Mr. Chairman, I have never been in the position to tell Congress what is appropriate to do or not to do.

Senator SHELBY. I said in your opinion.

Mr. HAMBERGER. Yes, sir. Obviously, it is appropriate for Congress——

Senator SHELBY. You represent the Association of American Railroads.

Mr. HAMBERGER. Yes, sir. It is appropriate for Congress to have oversight and take a look at any issue it deems appropriate, and that is an appropriate issue to take a look at. I hope that when Congress takes a look at it, they will take a look at it through the prism of what I talked about earlier today, and that is, what is best for the rail network.

Now, yes, there have been some problems as a result of the Conrail transaction, but I——

Senator SHELBY. What is best for the rail network or what is best for the American people?

Mr. HAMBERGER. I would suggest to you that the two are very closely aligned, and what is best for the rail network is, indeed, what is best for the North American economy.

Senator SHELBY. That is what it has to be.

Mr. HAMBERGER. Yes, sir. Absolutely. The Surface Transportation Board, when it approved the Conrail transaction, established a Conrail Transaction Council, which I believe was meeting monthly. It just recently began to meet bimonthly every other month, because the issues have begun to dissipate. I think right after the merger last July 1, the effective date, the meetings were perhaps a little bit more vigorous, shall we say, as service issues were discussed, but it is my understanding, and as I look at the metrics of cars on line, and velocity, both the CSX and Norfolk Southern have made tremendous strides in getting the operational aspect of that transaction put together.

PAPER BARRIERS

If I might just follow on one thing, and that is paper barriers. Arguments in this town seem to be won and lost sometimes on how you define the debate, and the paper barrier is nothing more and nothing less than a contractual obligation. In fact, in the railroad industry agreement we define it as a contractual obligation, incurred when short line carriers acquired lines from larger connecting carriers. In most cases, those obligations were in there as part of the up-front capital costs of buying the line.

Senator SHELBY. Explain what you mean.

Mr. HAMBERGER. In other words, you would come in and the class one would be selling the short line from "A" to "B," and in-

stead of charging "*x*" dollars, it would charge a substantial discount because of the agreement that the traffic that would continue to originate on that short line would continue to——

Senator SHELBY. Feed into——

Mr. HAMBERGER [continuing]. Feed into that Class I. So it is a price of buying the short line. So it is not really something that we went out there and said we are going to stop you from doing something, it was an arms-length negotiation——

Senator SHELBY. Well, what about where it is a situation that the short line existed prior to the Staggers Act?

Mr. HAMBERGER. It is my understanding that the paper barriers, as Frank said, they are not in——

Senator SHELBY. They do not apply.

Mr. HAMBERGER. Right.

Senator SHELBY. They do not apply.

Mr. HAMBERGER. Right. But the railroad could have been sold to the Class I prior to the Staggers Act.

Senator SHELBY. Okay.

Mr. HAMBERGER. There was some of that. So it is really—and the thing I was trying to drive at is not only how it came about, but that in this agreement we recognize the importance of growing the rail network, and so we have agreed, the Class Is have agreed that where new traffic originates, the paper barrier would not stand in the way of that new traffic, that if the Class I could not handle it, or if it was not the most efficient routing, the paper barrier would not stand in the way of that new traffic.

Mr. TURNER. Mr. Chairman, could I respond to that——

Senator SHELBY. Sure.

Mr. TURNER [continuing]. Very quickly? The first thing, this was in the mid-eighties, and since then, as I have mentioned, we have had 40 Class I railroads, you know, in 1980, and a lot of routes have been closed, and routes have been changed, and all that, so the whole terrain is different. We recognize that that is a contractual agreement, and if we cannot reach a way to remove this internally, we are going to have to look elsewhere for assistance to make this a national rail network, not one that is hindered by these paper barriers.

OPEN ACCESS

Senator SHELBY. Let me ask you both something. Other industries, as we know, and we know they are not railroads, such as the telecommunications industry, allow competitors to use their networks and infrastructure for a fee, not free now, but for a fee.

Some people have proposed that this be required in the railroad industry, and I have been told that Australia is committed to providing open access among the country's railroads. I believe this policy was instituted about 5 years ago, and it is overseen by the National Competition Council. Do you have any comments on that, Mr. Hamberger?

Mr. HAMBERGER. Well, I do.

Senator SHELBY. Okay.

Mr. HAMBERGER. Let me address that in two ways, if I might.

Senator SHELBY. I have not proposed that. I am just throwing it out.

Mr. HAMBERGER. Mr. Chairman, I am struggling here to find——

Mr. TURNER. Well, while he is doing that. We have that. We do have haulage rights and provisions for trackage rights in this country today. We do. I mean we have CSX operating over on Norfolk Southern track, and vice-versa.

Senator SHELBY. I knew you would find some of that.

Mr. HAMBERGER. I was going to answer, too. Thank you, Frank. Exactly. What is being proposed for the telecommunications and utility industries, we already have.

Senator SHELBY. You already have.

Mr. HAMBERGER. We have to accept traffic that is presented to us to carry. What I was looking for here is a study that we have——

Senator SHELBY. But you get a fee from them for using your railroad, do you not?

Mr. HAMBERGER. Well, you have to negotiate a rate. Yes, sir.

Senator SHELBY. In other words, if I had a railroad you could not just ride on it for free, could you?

Mr. HAMBERGER. That is correct.

Mr. TURNER. We had a study done by Mercer Management, several case studies, going throughout the world, and the bottom line is, let me just get to the bottom line, that as country after country has examined what is the best model for privatizing their railroads, they have come to the conclusion that the United States system is the best. Mexico, in our own hemisphere most recently, 2 years ago privatized three major railroads, and after years of investigation, decided that the U.S. system was the best.

The case study that we have from Australia, and you are exactly correct in that it provides for open access, the results are that open access has not improved rail's market share or induced new private investment, a key point, that implementing the interstate open access has resulted in significant additional costs for incumbent railroads, due to loss of coordination between rail operations and infrastructure, and because of the establishment of large bureaucracies. And finally, maintaining rail economies of scales is important to keeping rail competitive with truck, and positioning the rail network to be financially self-sustaining.

Much the same track record in Britain, where the government has had to step in because of disagreements between the company owning the track and the company leading the locomotives.

Senator SHELBY. We have been joined by Senator Specter, who has been in another committee. Senator Specter, do you have any comments or questions for these two gentlemen?

Senator SPECTER. Well, having come in at the end of their testimony, I only have seven questions for Mr. Turner and eight for Mr. Hamberger. I would like them sworn first, Mr. Chairman——

Senator SHELBY. All right.

Senator SPECTER [continuing]. Before I proceed.

Senator SHELBY. Do you really want them sworn?

Senator SPECTER. No. If they will affirm, it will be sufficient. On a serious vein, I want to compliment you, Mr. Chairman, on convening this hearing. This is a very, very important subject, one which affects Pennsylvania very, very decisively, with what has happened with the division of Conrail and the truckers and rail-

road issue, problems which have affected my State for many, many years.

The big anti-trust case back in the late fifties, early sixties, involved a battle between truckers and the railroads, and we still have to try to find a way, so I appreciate your activism. This is not quite as big a turnout as you got for Ford-Firestone, but it is very important.

Senator SHELBY. You know, we started Ford-Firestone last week, and it has now moved from this committee to the House Commerce Committee, back to our Commerce committee.

Senator SPECTER. They are still not catching up with you, Senator Shelby.

Senator SHELBY. Gentlemen, thank you for coming. Our third panel would be the regulatory authority, Ms. Linda J. Morgan, Chairman, Surface Transportation Board. Ms. Morgan, welcome to the committee. Your written statement will be made a part of the record in its entirety. You may proceed as you wish. I am sure you have heard their testimony, have you not, all the panels.

Ms. MORGAN. I have, indeed. I have been here since the beginning, Mr. Chairman.

Senator SHELBY. Thank you.

SURFACE TRANSPORTATION BOARD

STATEMENT OF LINDA J. MORGAN, CHAIRMAN

Ms. MORGAN. Mr. Chairman and Senator Specter, I am appearing at the request of the committee to discuss competition in the railroad industry. I will make my oral remarks brief. I have submitted written testimony that you are kindly including in the record in its entirety. My written testimony reviews concerns raised about the rail sector and how the Board has responded.

MERGER PROBLEMS

One of the issues that concerns shippers and that has concerned me involves the service problems experienced throughout the railroad industry in connection with the recent round of mergers. I have not been satisfied with where the industry's service record has been, but I believe that the board has been a positive force in helping, both on a formal and an informal basis, to fix problems that have arisen, while averting new ones. This was true during the service crisis in the West, and it remains true today, as we work to continue stabilizing service in the East, and our recent action, which was affirmed in court, imposing a 15-month moratorium while we revisit the Board's merger policy and rules, was important to ensure that existing service problems were not further aggravated.

OTHER ISSUES

The Board has also been a positive force in driving substantive changes in response to concerns brought to our attention. After our 1998 hearings on access and competition, for example, we changed the rules for rate complaints to make the process simpler, less burdensome, and more accessible for shippers—the so-called market dominance decision that was referenced earlier. The railroads have challenged our decision in court, but I am confident that the court will find that we have acted properly. We also changed our rules so that a shipper receiving poor service could obtain relief by using another carrier. And more recently, following up on our 4 days of hearings on major rail mergers, we are reexamining our merger policy and rules.

There are other issues that certain interested parties believe have not yet been fully addressed. In prior congressional testimony and in my 1998 letter to Chairman McCain and Subcommittee Chairman Hutchison, which is appended to my written testimony, I have indicated that legislation would be necessary to address those issues if Congress wanted to address them.

PREPARED STATEMENT

My position on those issues remains the same today as it has been in the past. The Board has stepped up to the plate and has responded creatively and aggressively in addressing issues that it can address within its authority.

I would be happy to answer any questions.

[The statement follows:]

PREPARED STATEMENT OF LINDA J. MORGAN

My name is Linda J. Morgan, Chairman of the Surface Transportation Board (Board). I am appearing at the request of the Committee to discuss competition in the railroad industry. Over the past 3 years, I have testified about that issue and related matters on several occasions, before both the Senate Committee on Commerce, Science, and Transportation and the House Committee on Transportation and Infrastructure. Additionally, responding to the concerns of Members of the Senate Commerce Committee, and in particular Committee Chairman McCain and Subcommittee Chairman Hutchison, in the spring of 1998, we held 15 hours of agency hearings on access and competition in the railroad industry, at which over 60 witnesses testified, and we took various actions in response. More recently, in March of this year the Board held 4 days of hearings, in which over 120 witnesses participated, on major rail consolidations and the future structure of the railroad industry, after which we imposed a 15-month moratorium on major rail mergers so that we could institute a proceeding, which is now pending, to reexamine our rail merger policy and rules.

I. THE BOARD'S RAIL ACCESS AND COMPETITION PROCEEDING

At our 1998 hearings, rail-dependent shippers complained that, as a result of consolidation in the industry, their competitive options had not been expanded, and that available remedies, particularly for service failures and rate relief, were burdensome, costly, and unresponsive. In an effort to address those concerns, the Board pursued a mix of regulatory action and private-sector initiatives directed by the Board.

In particular, at the Board's urging, railroads met among themselves and with customers and other interested groups to pursue certain private-sector responses. As a result, the large and small railroads entered into an agreement intended to ensure more effective utilization of smaller railroads in addressing the concerns raised by shippers, and I recently sent a letter to both groups requesting that they initiate further discussions to strengthen that agreement. In addition, the large railroads set up a series of meetings with shippers throughout the Nation to address customer service issues, which produced among other things an agreement by large railroads to publicize, for the first time, carrier-specific performance data, building upon data that the Board had itself been collecting for service monitoring purposes. Also, with the Board's prodding, grain shippers and coal shippers separately reached agreement with the rail industry on private-sector mechanisms for resolving disputes.

On the regulatory front, the Board changed its "market dominance" rules in order to make the procedures less cumbersome for shippers in pursuing rate relief at the agency. Specifically, our decision eliminated the review of product and geographic competition from the determination of whether a railroad has market dominance over the transportation at issue. This decision has been appealed in court, and oral argument will be held in the court in November. The Board also adopted new rules establishing ways to provide shippers that have concerns about poor service with the opportunity to obtain service from an alternate carrier.

Finally, on December 21, 1998, I wrote a letter to Chairman McCain and Senator Hutchison (attached as Appendix A) following up on our rail access and competition hearings. I summarized the Board's activities as to matters within its authority, described above, and suggested actions that Congress might wish to take, in areas in which the Board lacks authority, to address concerns that had been raised.

II. RAILROAD MERGERS

A. The Recent Round of Rail Mergers.—Although mergers and other changes in corporate structure have been going on in the rail industry for many decades, there has been substantial rail merger activity since the Staggers Rail Act of 1980 was passed, reflecting what has been occurring throughout the Nation's economy. In 1976, there were, by our calculations, 30 independent "Class I" (larger railroad) sys-

tems; nine of those systems have since then dropped down to Class II or III (smaller railroad) status because the revenue thresholds for Class I status were raised substantially some years ago; two large carriers went into bankruptcy; and the remaining 19 systems have been reduced to 7 independent systems in the past 24 years. This merger activity has not occurred because the Board (or the ICC) has sought out mergers. When two railroads file a merger application, we apply certain statutory standards to the proposal presented to us and approve the merger if it is in the public interest based on those standards and the record compiled.

Under the rules developed in the late 1970s and early 1980s, four major rail mergers have been approved since I became Chairman in 1995. These mergers were approved, however, only after the Board imposed many significant competitive and other conditions. From a competitive perspective, the conditions attached to the merger approvals have assured that no shipper's service options were reduced to one-carrier service as a result of a merger. The conditions also have provided for substantial post-merger oversight and monitoring that have permitted us to review both competitive and operational issues that have arisen. Additionally, they have provided for the protection of employees and the mitigation of environmental impacts, and our recent decisions have provided for the compilation of a "safety integration plan" that draws on the resources of the Board, the Federal Railroad Administration, and the involved carriers and employees. With respect to the service problems that have been associated with recent mergers, the Board, I believe, has been a positive force in restoring service and addressing service problems. And importantly, the merger approval, oversight, and monitoring process has evolved and been strengthened throughout this last round of mergers to reflect concerns raised and lessons learned.

In varying degrees, each of these mergers has had the support of segments of the shipping public, as well as that of employees and various localities, and each was considered by many of the interested parties to be in the public interest. A variety of shippers actively supported the Burlington Northern/Santa Fe (BNSF) merger, the inherently procompetitive Conrail acquisition, and the recent Canadian National/Illinois Central (CN/IC) merger. And the Union Pacific/Southern Pacific merger, which segments of the shipping community opposed while others supported it, was necessary, the Board believed, not only to prop up the failing Southern Pacific, but also to permit the development of a rail system in the West with enough of a presence to compete with the newly merged BNSF.

I know that certain shippers have taken the view that recent mergers have inhibited competition. But based on the record developed, in approving these four mergers, the Board (and, earlier, the ICC) concluded that, with the significant conditions imposed, they would not diminish competition and in fact could enhance competition; they would produce significant transportation benefits; and they were otherwise in the public interest. The Board will continue to exercise its oversight authority in accordance with those objectives, and in this regard, we currently have three comprehensive merger oversight proceedings under way, in which we are monitoring the effectiveness of our competitive and other conditions. And we continue to be active in monitoring service performance and addressing service problems.

B. The Railroad Merger Moratorium.—On December 20, 1999, BNSF and CN notified the Board that they intended to file an application, on or shortly after March 20, 2000, seeking Board approval to bring their railroad systems under common control. Given the aggressive consolidation and associated disruptions that had occurred in the railroad industry during the past several years, and the likelihood that the BNSF/CN proposal would set off yet another full, and likely final, round of major rail consolidations, the Board issued an order on December 28, 1999, waiving the so-called "one case at a time" rule for the BNSF/CN proceeding and stating that, if the BNSF/CN proceeding went forward, the Board would consider not only the direct impacts of that combination, but also evidence of the cumulative impacts and crossover effects that would likely occur as other railroads developed strategic responses in reaction to the proposed combined new system. In addition, given the prospect of significant further consolidation within the railroad industry, and the Board's concern that the railroad industry and the shipping public had not yet recovered from the service disruptions associated with the previous round of mergers, the Board issued an order on January 24, 2000, opening a proceeding (STB Ex Parte No. 582) to obtain public views on the subject of major rail consolidations and the present and future structure of the North American rail industry.

As part of the Ex Parte No. 582 proceeding, the Board took written and oral testimony from all sectors associated with the rail industry, including large and small rail carriers; large and small shippers representing various commodity groups; intermodal and third party transportation providers; rail employees; state and local interests; financial analysts and economists; and Members of Congress and other fed-

eral agencies. The overwhelming weight of the testimony, particularly the testimony taken over the 4 days of oral hearings, was that the rail community is suffering from "merger fatigue;" that, given the experience with past merger implementation, along with the current state of service in the industry, more mergers at this time would aggravate service problems; that the Board's existing policies and procedures are not appropriate for what could likely be the final round of mergers; and that fundamental changes to the merger rules and policies are needed before any new mergers move forward.

The Board agreed, concluding in a decision issued on March 17 (attached as Appendix B) that the industry is not ready and the merger rules are not appropriate for what will likely be the final round of restructuring of the North American railroad industry that may well result in two transcontinental railroads. To avoid the service disruptions—beyond those already being experienced—that could have developed throughout the rail industry from further consolidation at this time, and to allow a broad reexamination of its merger rules and policies, the Board put a 15-month hold on the filing of any new mergers.

The moratorium was challenged in court, and on July 14, only a month after the oral argument, the court, by a 2–1 decision, upheld the agency's action. Although the dissent concluded that the statute requires the Board to handle any application that a railroad wants to file within specified time frames, the court majority saw the case as we did: it understood that we need new rules to address the service and competitive issues associated with future mergers; it recognized that we could not effectively review new mergers at the same time as we are revisiting the rules; and it found that we therefore have the authority to impose a moratorium to fulfill our broad statutory obligation to determine whether specific merger proposals are in the public interest. Given the concerns over the service and competitive issues that would be implicated if new mergers were to move forward now, the court found that

> "forcing the Board to [consider new applications] before it has had an opportunity to determine where the public interest lies would defeat altogether the purpose of the agency's review, whereas allowing the Board to focus for a reasonable time upon revising its [merger] criteria would likely enable the Board to continue to meet its deadlines once it resumes processing applications."

Shortly after the court issued its ruling, BNSF and CN withdrew their merger proposal.

C. The Board's Rulemaking to Revisit its Rail Merger Policy and Rules.—The Board has issued an advance notice of proposed rulemaking (ANPR) to initiate the process of reexamining its merger rules and policy. On October 3, the Board expects to issue a notice of proposed rulemaking (NPR), and, after reviewing comments on the NPR, it will issue final rules by June 11, 2001. I cannot say too much about the proceeding, as it is still pending, but I can summarize the key observations that the agency made as it decided to start the process. First, the industry has changed since the existing merger policy and rules were approved. It is now more consolidated after the last round of mergers, and the benefits associated with prior mergers related to reduction in excess capacity and efficiencies are not likely to result to the same degree from future mergers; we thus need to look at merger benefits differently for the future. Second, with future merger proposals likely leading to the final round of consolidation, the combined systems would be much larger, and the risks associated with failure would increase substantially. With greater consolidation, problems could be broader in scope and harder to fix, and there may be fewer alternatives to which we can turn; we must make sure that the benefits clearly outweigh any potential harm. Third, we have learned that service problems can occur with mergers even when carriers plan and focus on service; we must look for new and better ways to guard against and offset merger-related service problems and to deal with them when they occur.

And after having reviewed comments from over 100 parties filed in response to the ANPR from a variety of interests, I can say that there clearly will be changes made to our merger policy and rules. As we have already indicated, in reviewing future merger proposals, we will look at downstream effects, that is, we will consider the likely responses of other carriers as the Board reviews a particular merger application in the future. And in considering whether a future merger proposal is in the public interest, that is whether the benefits outweigh the potential harm, we are considering how to define and determine benefits, including a review of such issues as whether we should require future mergers to enhance competition, whether we should look at the extent to which benefits could be realized by other means, and whether there should be a more specific accounting of the benefits and accountability for benefits claimed. We also are reviewing how to define potential harm, including competitive and service harm, and how potential harm might be mitigated

and offset. Furthermore, we are looking at how we address service issues, in particular how we look at service improvement as a merger benefit, and how we ensure service accountability, guard against service failure as a transaction is being implemented, and provide for resolution of service problems if they occur. Finally, we will need to address other related matters, such as safety, employee concerns, smaller railroad issues, and cross-border matters such as trade and defense.

III. RAIL SERVICE ISSUES

Over the past few years, we have used our general oversight and specific legal authority, reporting, and specific merger-related monitoring to promote service improvement and resolve service problems. Among other things, we took unprecedented actions to address the rail service crisis in the West. We have required carriers to develop and publicize detailed plans for managing consolidations and for addressing service issues. We have directed an unprecedented amount of carrier reporting (both public and confidential) about carrier service. Board representatives are continually in communication with carrier management about general service issues, and they work closely on an ongoing basis with carriers and shippers to address individual service problems on an informal basis.

I know that carriers have experienced substantial service problems notwithstanding our efforts, but I believe that we have been a positive and constructive force. With regard to the rail crisis in the West, for example, under the umbrella of a 9-month emergency service order, the Board required substantial and heretofore unprecedented operational reporting, engaged in substantial and heretofore unprecedented operational monitoring, and redirected operations in a focused and constructive way. The Board was successful in working on an informal basis with affected shippers to resolve service problems, and it was careful not to take actions that might have helped some shippers or regions but inadvertently hurt others. And the Board proceeded in such a way as not to undermine, but rather to encourage, important private-sector initiatives that facilitated and were integral to service recovery, such as the unprecedented creation of the joint dispatching center near Houston, TX, and the significant upgrading of infrastructure designed to prevent future service problems. And in connection with the Conrail acquisition in the East, we have engaged in extensive pre- and post-implementation monitoring, including the review of significant operational metrics and plans, and have continued to work constructively with carriers and with shippers to resolve service problems.

IV. RAIL RATE ISSUES

Since it was created nearly 5 years ago, the Board has tackled several important rail rate matters, and in this regard it has been responsive to shipper and other concerns in accordance with the law. In particular, we have been committed to resolving formal and informal shipper complaints expeditiously, clarifying applicable standards for resolution of formal complaints, and leveling the playing field to ensure that the formal process is not used simply to delay final resolution.

In particular, the Board has established deadlines for rate cases and procedures to expedite the decisional process, and decisions resolving large rail rate complaints have refined the standards for developing the record in these cases. A few of the rate cases have been made possible by the Board's judicially-approved decisions in the "bottleneck" cases, which construed the statute as permitting challenges to bottleneck rates (rates for a segment of a through movement that is served by a single carrier) whenever the shipper has a contract over the non-bottleneck segment. As I have already noted, we recently modified the market dominance rules to streamline the process for handling rate complaints, and I feel confident that this action will be upheld by the court in the appeal brought by the railroads. The "constrained market pricing" (CMP) procedure for determining whether or not a rate is reasonable is now a well accepted way of measuring rate reasonableness for larger rate cases. Shippers have won substantial relief in major rate cases that have been decided by the Board. Some new large rate cases are pending, and several others have been settled without involvement of the Board.

The Board has also adopted simplified rules for small rail rate cases. However, no such cases have been brought to date under these rules. Concerns remain that those rules are still too complex. In my letter to Chairman McCain and Senator Hutchison, I explained that the Board's rules reflect the statute and the standards that must be balanced, but I also recommended that Congress consider adopting a single benchmark test or some other simplified procedure for small rate cases to address process concerns.

V. SUMMARY

I believe that the Board has compiled a solid record of responding in significant ways to concerns raised about the rail sector through "common sense government," promoting private-sector initiative and resolution where appropriate and undertaking vigilant government oversight and action where necessary in accordance with the law. The focus of any action affecting the rail sector should be on how best to achieve adequate rail service at reasonable rates for all users. At the same time, we need to ensure an appropriate level of capital reinvestment so that carriers are able to provide adequate service with a rail system that can be sustained and is able to grow to meet the needs of the public. We have learned that the rail system is fragile, and there is little margin for error. Any decision that we make now will have a profound impact on the transportation system of the future.

This concludes my written testimony. As I stated earlier, I am including a copy of my December 1998 letter to the leadership of the Senate Commerce Committee and the Board's March 17 rail merger moratorium decision.

ATTACHMENT 1

SURFACE TRANSPORTATION BOARD,
Washington, DC, December 21, 1998.

The Honorable JOHN MCCAIN,
Chairman, Committee on Commerce, Science, and Transportation,
U.S. Senate, Washington, DC.

The Honorable KAY BAILEY HUTCHISON,
Chairman, Subcommittee on Surface Transportation and Merchant Marine,
U.S. Senate, Washington, DC.

Dear CHAIRMAN MCCAIN AND CHAIRMAN HUTCHISON: In our letter of June 30, 1998, Vice Chairman Owen and I reported to you on the Board's recent informational hearings to examine issues of rail access and competition in today's railroad industry. After summarizing the testimony, the Board responses to the testimony (including the Board's April 17 decision, copy attached hereto as Addendum A), and further actions that might be taken by Congress, our letter reported on certain ongoing private-sector initiatives. The purpose of this follow-up letter is to inform you of the outcome of the Board's proceedings and the private-sector initiatives undertaken as a result of the hearings; and to suggest possible ways in which related issues that are still outstanding might be addressed.

1. *Board Proceedings*.—As we pointed out in our prior letter, the Board initiated rulemaking proceedings addressing market dominance and service inadequacies. The Board has completed those proceedings. In *Market Dominance Determinations—Product and Geographic Competition,* STB Ex Parte No. 627 (STB served Dec. 21, 1998), the Board repealed the product and geographic competition tests of the market dominance rules. This change applies to both large and small rail rate cases. In *Relief for Service Inadequacies,* STB Ex Parte No. 628 (STB served Dec. 21, 1998), the Board issued rules giving shippers and smaller railroads opportunities to obtain service from alternate carriers during periods of poor service, using either the emergency service or the access provisions of the law. Copies of these decisions are attached as Addenda B and C.

2. *Railroad Industry Discussions*.—One of the issues that arose at the Board's hearings was the desire of smaller railroads to eliminate industry restrictions on their ability to compete. The Board directed the railroads to address this issue through private-sector discussions. As our earlier letter noted, the large and small railroads separately indicated that they were having some difficulties in reaching agreement, but the Board encouraged them to continue their dialogue, and indicated that it would take action, as appropriate, if they did not reach agreement. We are pleased to report that in September, an agreement was reached, portions of which were formally approved by the Board. A copy of the Board's press release announcing the agreement is attached as Addendum D.

3. *AAR/NGFA Agreement*.—In our June 30 letter, we advised you that, consistent with the Board's preference that private parties seek non-litigative dispute resolution mechanisms, the railroads were meeting with the National Grain and Feed Association (NGFA) in an effort to arrive at an agreement on a mandatory arbitration program to resolve certain disputes. The Association of American Railroads (AAR) and the NGFA recently announced such an agreement. A copy of the AAR/NGFA press release describing the agreement is attached as Addendum E.

4. *Formalized Dialogue Among Railroads and Shippers*.—Another issue that arose at the Board's hearings involved the concern of some shippers that railroads had

not been adequately communicating with them. To address this concern, the Board directed railroads to establish formalized dialogue with their shippers and their employees, particularly about service issues in general, small shipper issues, and any other relevant matters. The railroads have organized and conducted discrete and formalized meetings with various shippers and shipper groups throughout the Nation. The meetings, which have been attended by Chairman Morgan, were held in Chicago, IL; Houston, TX; Atlanta, GA; Newark, NJ; and Portland, OR. AAR's letter to the Board describing the meetings and the follow-up actions to be taken—including, among other things, issuance of performance reports by each of the large railroads, development of a plan for facilitating interline movements, and continuation of the outreach meetings—is attached as Addendum F. The Board, which supports the continued dialogue that the AAR letter promises, will be closely monitoring all of these follow-up steps. In addition to the AAR letter, a letter from various shippers regarding those meetings, and Chairman Morgan's response to that letter, are attached as Addenda G and H.

5. *Additional Railroad/Shipper Discussions*.—Other shipper concerns that were raised at the Board's hearings involved railroad "revenue adequacy" and the Board's competitive access rules in general. Concluding that each of these issues could be better addressed initially in a private-sector rather than governmental forum, the Board directed railroads to meet with shipper groups to address the issues under the auspices of an Administrative Law Judge. Although extensive meetings were conducted, the parties could not reach agreement on these issues. Attached as Addendum I are copies of the reports that the parties submitted to the Board on their recommendations as to these issues.

Revenue Adequacy.—Although the concept of revenue adequacy has thus far had minimal real-world impact, the existing judicially approved revenue adequacy measurement, which focuses on a railroad's return on investment, has been a source of controversy. Based on suggestions from railroad and shipper representatives at the Ex Parte No. 575 hearing, the Board directed railroads to meet with shippers with a view toward selecting a panel of three disinterested experts to make recommendations as to an appropriate revenue adequacy standard, and to name a panel and report back to the Board by May 15, 1998. The panel was then to report back with final recommendations on July 15, 1998.

Shippers opposed this approach, contending that it would be expensive and inefficient for them to pay part of the costs of the expert panel, while also paying for litigation associated with the conduct of the proceeding before the panel and the Board (and, presumably, if either side wanted to litigate further, the courts). Ultimately, most of the participating shippers recommended that the Board itself initiate a new rulemaking looking to adoption of a revenue adequacy approach that would permit the Board to consider a variety of financial indicators in determining whether railroads are revenue adequate.[1] By contrast, contending that the multiple indicator approach advanced by the shippers would not provide enough certainty or predictability, the railroads supported the expert neutral panel approach.

Competitive Access.—The Board directed railroads and shippers to attempt to find common ground, and to meet, negotiate, and report back to the Board by August 3, 1998. After extensive meetings, the parties reached an impasse. The principal areas of concern involved the definition of terminal areas; the scope of reciprocal switching; appropriate compensation to an incumbent carrier; and, perhaps most fundamentally, whether access to other carriers ought to be required only when an incumbent carrier has acted in some sort of an anticompetitive way, or whether it ought to be provided whenever additional competition is determined to be in the public interest.

6. *Possible Resolutions of Revenue Adequacy, Competitive Access, and Small Rate Case Issues*.—The Board appreciates the opportunity to assist Congress in addressing the transportation issues that face the Nation during these important times and believes that it has appropriately addressed matters of concern within the scope of the authority given to it by Congress. Nevertheless, it is likely that certain legislative proposals will be discussed in Congress during the next session. Following are some thoughts on some of the issues as to which legislative proposals are likely.

Revenue Adequacy.—The revenue adequacy issue, in our view, has unnecessarily polarized the transportation community. The underlying policy objective—that the Board's regulatory approach among other goals permit railroads to earn adequate revenues—is a laudable one that should be retained. As we see it, however, and as we have testified before, the revenue adequacy status of any particular railroad has little practical effect. Revenue adequacy is not a factor in maximum rate cases pros-

[1] The shippers indicated that, given the Board's own resources and their own priorities, they would not object if the Board deferred this rulemaking until a later date.

ecuted under the "stand-alone cost" (SAC) methodology. It is not a factor in construction, merger, or abandonment proceedings. Revenue adequacy does play a small role in rate cases brought under the "small case" guidelines, but to date, no such cases have been brought. Therefore, Congress may wish to consider legislatively abolishing the requirement that the Board determine on a regular basis which railroads are revenue adequate.

That is not to say that Congress should abandon the concept of revenue adequacy. As we have testified before, in order to oversee the industry, the Board needs to have some indication of how the industry is faring financially. Moreover, revenue adequacy is one of the non-SAC constraints in the Board's "constrained market pricing" (CMP) methodology for handling larger maximum rate cases. Although, thus far, all railroad rate cases brought under CMP have been handled under SAC procedures, if a "revenue adequacy" case were brought, the Board would need a basis on which to address it.

For those reasons, and because Congress may not wish to abolish the revenue adequacy requirement immediately, the questions that have been raised about the Board's current revenue adequacy methodology cannot be ignored. With its credibility on the issue under challenge by several shippers, however, the Board, with its limited resources, does not plan to undertake the shippers' proposed rulemaking at this time. Rather, given the benefits, the Board continues to support the expert panel approach that was suggested by both shipper and railroad interests during the Board's Ex Parte No. 575 hearings. The shippers are correct that someone would need to provide funding for the expert panel; that costs rise as layers of litigation are added to the regulatory process; and that it is the Board, and not a private expert panel, that is charged with establishing regulatory procedures. Nevertheless, the Board is willing to make a commitment to give great deference to the expert panel, which would be a competent body that would be perceived as neutral if selected after agreement among the private parties. If the private parties were also to give the expert panel deference, rather than to litigate should they disagree with its (and the Board's) conclusions, then not only would the parties' confidence in the objectivity of the process likely be enhanced, but the overall costs also would likely be contained.

Competitive Access.—In its Ex Parte No. 575 decision served April 17, 1998, the Board addressed in some detail the implications of the competitive access debate. The differences between the railroads and the shippers on the Board's competitive access rules are fundamental, and they raise basic policy issues—concerning the appropriate role of competition, differential pricing, and how railroads earn revenues and structure their services—that are more appropriately resolved by Congress than by an administrative agency. Moreover, the so-called "bottleneck cases," which involve issues related to competitive access, are still being reviewed in court. For those reasons, although the Board has moved aggressively to adopt the new rules described above to open up access during times of poor service, the Board does not plan to initiate administrative action to otherwise revisit the competitive access rules at this time.[2]

Small Rate Cases.—As you know, the Board has adopted small rate case guidelines, which apply in cases in which CMP cannot be practicably used. Under these small case guidelines, the Board reviews the profits that the carrier obtains from the challenged rate from three perspectives: it compares them with the profits that railroads in general earn from comparable traffic; it compares them with the level of profits that the carrier would need to obtain from all of its potentially captive traffic in order to become "revenue adequate"; and it compares them with the profits that the defendant carrier earns on all of its potentially captive traffic. Taken to-

[2] Should Congress choose to review the issue, we would note, as we did in our April 17 decision, that the shape and condition of the rail system that open access would produce is a significant but unresolved issue. Certain shippers assume that the replacement of differential pricing by purely competitive pricing would reduce the rates paid by shippers, and that added competition would result in increased infrastructure investment. The railroads, by contrast, argue that, because their traffic base would shrink, the rates paid by those shippers that would continue to receive service would actually increase, even as overall revenues received by railroads would decline, because the overall traffic base from which costs could be recovered would be reduced. Additionally, as the Board noted in the April 17 decision, carriers could be expected to seek to maintain an adequate rate of return by cutting their costs, which could include shedding unprofitable lines and reducing new investment in infrastructure. Thus, while certain shipper representatives believe that an open access system would ensure better service, concern has been raised that, unless smaller railroads were able to fill in service gaps that could be created, open access could produce a smaller rail system that would serve fewer shippers, and a different mix of customers, than are served today, with different types and levels of, and perhaps more selectively provided, service.

gether, these three comparisons are designed to permit carriers to price "differentially" as provided under the law, in a way that will promote their financial health, while still protecting individual shippers from bearing an unfair share of a particular carrier's revenue needs. Although the procedures may sound complex, in fact the information needed to make this sort of a case is readily available at reasonable cost. Moreover, the Board concluded, after reviewing many years of debate, that these guidelines are the only procedures that have been identified that readily address each of the concerns that the Board must consider under the statute.

Nevertheless, we are aware that certain shippers are concerned that, for small cases, anything other than a single benchmark test could unreasonably impede access to the regulatory process. If Congress agrees, it could adopt specific small rate case standards. As an example, it could provide that, for certain types of cases, all rates above a specified revenue-to-variable cost ratio, or series of ratios, would be considered unreasonable. If this approach were to follow the tenets of the existing statute, the specifics of such an approach—for example, the cases to which it would apply, and the level or levels at which rates might be capped—would have to balance issues such as differential pricing and railroad revenue need against the fairness in requiring captive shippers to pay substantially higher prices than competitive shippers.

7. *The Override of Railroad Collective Bargaining Agreements*.—Another matter that may be presented to Congress next year is the question of limiting the authority of arbitrators under the standard labor conditions imposed by the Interstate Commerce Commission (ICC) or the Board to modify existing collective bargaining agreements (CBAs) in the process of implementing approved rail consolidations. This process has become extremely controversial since a decision of the Supreme Court in 1991. That decision, *Norfolk & Western Ry.* v. *American Train Dispatchers Ass'n,* 499 U.S. 117 (1991) (N&W), held that the exemption from all other laws to carry out approved rail consolidations provided by former 49 U.S.C. 11341(a) and carried forward as 49 U.S.C. 11321(a) extends to existing CBAs and operates automatically to permit the override of CBA provisions as necessary for implementation of an approved rail consolidation.

Present practice for implementing Board-approved rail consolidations is for the unions and the railroads involved to negotiate agreements to enable implementation of the Board-approved transaction. If they are unable to agree, the matter is submitted to an arbitrator selected by the parties or the National Mediation Board if the parties cannot agree on the choice of an arbitrator. Because the arbitrator is acting under section 11321(a), he or she has the authority and the obligation to modify existing CBAs as necessary to carry out the transaction.

In the recent Conrail Acquisition[3] decision, at the request of the various labor organizations, the Board specifically declined to make a finding in its decision approving the transaction that overriding provisions in Conrail CBAs was necessary to carry out the transaction. Rather, the Board specifically left the determination of necessity to the process of negotiation and, if necessary, arbitration. Even more recently, in the Carmen[4] decision, the Board elaborated on the limitations on arbitrators' authority to modify CBAs as permitted by the Supreme Court's N&W decision. In Carmen the Board held that overrides of CBAs by arbitrators are limited, among other things, to the override authority exercised by arbitrators during the period 1940–1980, an era marked by labor/management peace regarding the implementation of rail consolidations. A copy of the Carmen decision is attached as Addendum J.

Nonetheless, the Board is aware that labor representatives oppose, and are understandably dissatisfied with, any provision or action that permits overriding any existing CBA provisions. If Congress were to agree with their position, given the Supreme Court decision in N&W, some modification of section 11321(a) so as to exclude CBAs, or some other legislative expression, could address labor's concerns in this area.

8. *Conclusion*.—Again, we appreciate the confidence that Congress has shown by allowing us to play a role in this important process, and we remain committed to providing a forum for constructive dialogue and appropriate regulatory relief. If we

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[3] *CSX Corporation and CSX Transportation, Inc., Norfolk Southern Corporation and Norfolk Southern Railway Company—Control and Operating Leases/Agreements—Conrail Inc. and Consolidated Rail Corporation,* STB Finance Docket No. 33388, Decision No. 89 (STB served July 23, 1998).

[4] *CSX Corporation—Control—Chessie System, Inc. and Seaboard Coast Line Industries, Inc. (Arbitration Review),* Finance Docket No. 28905 (Sub-No. 22), and *Norfolk Southern Corporation—Control—Norfolk and Western Railway Company and Southern Railway Company (Arbitration Review),* Finance Docket No. 29430 (Sub-No. 20) (STB served Sept. 25, 1998). This decision was not appealed by any party.

can be of further assistance in this or any other matter, please do not hesitate to contact us.

Sincerely,

LINDA J. MORGAN,
Chairman.

ATTACHMENT 2

SERVICE DATE—LATE RELEASE MARCH 17, 2000

SURFACE TRANSPORTATION BOARD DECISION

STB EX PARTE NO. 582

PUBLIC VIEWS ON MAJOR RAIL CONSOLIDATIONS

DECIDED: MARCH 16, 2000

OVERVIEW

This proceeding was triggered by a notice filed on December 20, 1999, indicating that another major railroad merger application was imminent.[1] The railroad industry has consolidated aggressively in recent years; now that Consolidated Rail Corporation (Conrail) has been divided between CSX and NS, only six large railroads remain in the United States and Canada.[2] In an order issued on December 28, 1999,[3] we stated that, if the BNSF/CN proceeding went forward, we would consider not only the direct impacts of that combination, but also evidence of the cumulative impacts and crossover effects that would likely occur as other railroads developed strategic responses in reaction to the proposed combined new system. Additionally, given the prospect of significant further consolidation within the railroad industry, and our concern that the railroad industry and the shipping public have not yet recovered from the service disruptions associated with the previous round of mergers, we opened this proceeding to obtain public views on the subject of major rail consolidations and the present and future structure of the North American rail industry.

As part of this proceeding, we took written and oral testimony from all sectors associated with the rail industry: large and small rail carriers; large and small shippers representing various commodity groups; intermodal and third party transportation providers; rail employees; state and local interests; financial analysts and economists; and Members of Congress and other federal agencies. Certain parties expressed support for a radical overhaul of the entire regulatory scheme; some parties expressed support for a "business-as-usual" approach to rail regulation in general and rail mergers in particular; still others took the view that no more rail mergers should be permitted under any circumstances. But the overwhelming weight of the testimony, particularly the oral testimony, was that, at a minimum, our merger policy must be reexamined—and must be reexamined now—before any new major mergers are processed. Because we conclude that the rail community is not in a position to now undertake what will likely be the final round of restructuring of the North American railroad industry, and because our current rules are simply not appropriate for addressing the broad concerns associated with reviewing business deals geared to produce two transcontinental railroads, we agree.

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[1] In particular, The Burlington Northern and Santa Fe Railway Company and Canadian National Railway Company filed a notice of intent to file, on approximately March 20, 2000, an application seeking Board authorization under 49 U.S.C. 11323–25 and 49 CFR part 1180 for a major transaction (referred to as the BNSF/CN transaction) under which the two railroads would be brought under common control.

[2] The six are: The Burlington Northern and Santa Fe Railway Company (BNSF); Union Pacific Railroad Company (UP); CSX Transportation, Inc. (CSX); Norfolk Southern Railway Company (NS); Canadian National Railway Company (CN); and Canadian Pacific Railway Company (CP). Two smaller U.S. Class I railroads (Grand Trunk Western Railroad Incorporated and Illinois Central Railroad Company (IC)) are affiliated with CN. A third smaller U.S. Class I railroad (Soo Line Railroad Company) is affiliated with CP. A fourth smaller U.S. Class I railroad (The Kansas City Southern Railway Company (KCS)) remains independent but has entered into a comprehensive alliance with CN and IC.

[3] *Canadian National Railway Company, Grand Trunk Western Railroad Incorporated, Illinois Central Railroad Company, Burlington Northern Santa Fe Corporation, and The Burlington Northern and Santa Fe Railway Company—Common Control*, STB Finance Docket No. 33842, Decision Nos. 1 & 1A (STB served Dec. 28, 1999) (published in the Federal Register on Jan. 4, 2000, at 65 FR 318).

We recognize that the Government is not in the business of drawing railroad maps, and we are not attempting to do so in this proceeding. We are also aware that the law that we administer generally contemplates private initiatives that are then subjected to regulatory scrutiny. But we are required to take actions and to fashion regulations that advance our mandate—under which we are to approve mergers only to the extent consistent with the public interest, and under which we are to promote a safe and sound rail system that runs smoothly and efficiently to provide service for rail customers—in a manner that is consistent with the overall rail transportation policy established by Congress.[4] Not only would it be impracticable for us to try to act on a final round of mergers while we are in the process of developing new merger rules, it would also be disruptive to the rail system and to rail service that remains well below acceptable levels in many areas. The disruption would go far beyond the specific interests of BNSF and CN and the carriers that compete with them;[5] it could irreparably damage the entire industry, to the detriment of the interests of shippers, rail employees, and the national economy and defense.

Therefore, through this decision, we are announcing that, over the next 15 months, we will initiate and complete a proceeding that will provide new merger rules. To permit the development of the new rules, and to ensure that the industry has had the opportunity to fully recover from service problems associated with recent mergers without the distractions associated with consideration of additional mergers, we will maintain the status quo by ordering a suspension of all merger activity, categorized as major transactions, until after the final merger rules are issued, or a total period of 15 months.[6]

BACKGROUND

As indicated, our hearing was triggered by the announcement that BNSF and CN seek to merge. This announcement came as the rail sector and the shipping public have been struggling to recover from the disruptions associated with the most recent round of mergers. Those consolidations regrettably have been accompanied by a number of serious service problems, and, while service levels have shown improvement in certain areas, overall, service is clearly not where it should be. Promised customer benefits have not yet been fully realized, and carrier relationships with customers, rail employees, and local communities have been strained. The performance of railroad stock market equities has been trending downward since the service problems developed in the East, taking a particularly sharp turn downward immediately after the BNSF/CN merger proposal was announced. If it continues, the downturn in the stock value, reflecting a loss of investor confidence, could threaten the capital investment that is needed by the rail industry to ensure that service improvements and growth can be sustained.

BNSF and CN have argued that their consolidation proposal should be examined on its own merits now, because it is a good one that will produce benefits for the shipping public. But regardless of the merits of the BNSF/CN proposal standing alone, many parties expressed concern that, if the BNSF/CN proceeding goes forward, that proposal will not go forward alone. Indeed, the Class I railroads have clearly stated that they would find it necessary to respond in kind, and there is a substantial possibility that, absent decisive action on our part, in the very near future, we will likely be left with the prospect of only two large railroads serving North America. We at the Board, like members of the shipping public, are seriously concerned about the competitive consequences of this level of industry restructuring, and, in any event, about whether it would be in the public interest at this time,

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[4] The merger provisions of 49 U.S.C. 11324 direct the Board to consider the public interest in general and, in particular, the adequacy of transportation to the public; inclusion of other rail carriers in particular mergers; and financial, employee, and competitive issues. The rail transportation policy of 49 U.S.C. 10101, which guides us in our regulatory activities, directs us, among other things, to promote safety, efficiency, good working conditions, an economically sound and competitive rail transportation system, and the needs of the public and the national defense.

[5] We fully understand that our mandate is to protect competition, not particular competitors.

[6] In particular, within 20 days, we will issue an advance notice of proposed rulemaking (ANPR) suggesting areas in which new merger rules can be developed addressing the concerns that have been raised. (We are not in a position to propose specific rules at this time because, while several parties raised broad issues of concern, specific rule changes were not the focus of our hearing.) We will provide a total of approximately 60 days for comments and replies to the ANPR, and then, within an additional 120 days, we will issue a notice of proposed rulemaking (NPR). We will provide a total of 100 days for comments, replies, and rebuttal with respect to the NPR, and then, within an additional 150 days, we will issue final rules (a total of approximately 15 months from now).

while the industry is still recovering from service difficulties and other disruptions associated with the last round of major rail consolidations. And so we held a hearing to help us address the important issues relating to major rail consolidations and the present and future structure of the North American railroad industry.

At the hearing, several significant themes kept recurring. We heard from Members of Congress, federal and state government agencies, shippers, and employees about poor service; the threat that another round of proposed mergers would further degrade service; and the need to let some time pass so that railroads, their employees, and their customers can catch their breath before the industry embarks upon what will likely be the final round of mergers. We heard from shippers and Members of Congress about the threat that another round of mergers would pose to competition in the industry, and we heard from a significant number of participants about the need for new rules to govern future mergers. We heard from Department of Transportation Secretary Rodney Slater that the BNSF/CN transaction should not be reviewed under a "business as usual" approach. And we heard from railroads and from members of the financial community about the financial instability of the industry, which could be further threatened by a new round of major mergers. We will discuss each of those issues.

THE TESTIMONY

1. *Service Instability*.—Rail mergers are pursued to increase efficiency and to improve service. At least at the beginning, however, service disruptions have accompanied the implementation of recent large mergers, and many shippers have experienced substantial adverse impacts in connection with the last round of mergers, beginning with the combination of the BN and SF systems, proceeding with the UP acquisition of the Southern Pacific (SP) system, and ending with the acquisition and division of Conrail by CSX and NS.[7] The overwhelming testimony at our hearing indicated that the shipping public has still not recovered from those disruptions. Shippers described the problems that they faced, and that many continue to face, as a result of their inability to obtain reliable service. Railroad chief executive officers (CEOs) involved in the last round of mergers testified how difficult merger implementation can be, even with the best planning and with the experiences of prior mergers to guide them. Small railroads testified that their ability to participate in the transportation business has been threatened by poor service. A senior rail equity research analyst whose firm is not representing any railroad in the newly initiated round of rail merger negotiations reported on a survey that he had conducted of large institutional investors that he advises. He testified that poor service is partially responsible for the lack of investor confidence in the railroad industry, and that many investors do not want further mergers at this time, nor do they want the legislative changes (which they view as reregulation) that they fear further mergers will precipitate.[8] And the regular service performance reports provided by the railroad industry indicate that, while service is improving on some fronts, overall, it is still below where it needs to be.

That is why many of the shippers testifying—both large and small—asked us not to permit any further mergers at this time, and certainly not without a change in the way in which we evaluate mergers. Similar sentiments were expressed by Members of Congress, representatives of small railroads, and representatives of railroad employees.[9] Even the CEOs of the large eastern railroads stated that initiation of

[7] We have also recently approved CN's application to control IC, but that transaction, which is largely end-to-end, has not yet been fully implemented.

[8] Representatives of investment firms that are advising the applicants in the BNSF/CN proceeding (who also do not want what they describe as reregulation) pointed out that there is no way to know definitively what is driving rail stock prices downward, and that the drop in rail stock prices could simply be related to many of the same factors that are depressing the stocks of companies in other "old economy" industries. We do not doubt that the drop in rail stock prices is attributable to many sources, but it is clear that the current service disruptions and the announcement of the proposed BNSF/CN transaction have played a role. We believe that the potential for further disruption that would accompany the initiation of a final round of mergers at this time concern investors, who do not currently view railroad mergers as a positive because, overall, these mergers have not yet produced the good financial results that were promised.

[9] Clinton Miller, testifying on behalf of the United Transportation Union (the largest railroad union), alluded to both employee dislocations and service disruptions in support of his request for a hold on further mergers. Mark Filipovic of the International Association of Machinists expressed the view that recent mergers did not produce what was promised for railroads, shippers, or employees. Michael Wolly, representing three unions, requested a hold on further mergers until the issues associated with employee dislocations are resolved. And a number of the representatives of rail employees expressed concern about the fact that, under the BNSF/CN proposal, a major U.S. railroad would become foreign-controlled.

a new round of mergers would require them to focus on structural and management changes necessary to protect their own positions in the market, rather than on improving their below-par service. In short, in light of the service issues attending prior mergers and looming over future mergers, we heard widespread concern that any major consolidations at this time would not be in the national interest.

2. *Competitive Issues*.—For several years, parties involved with the railroad industry have engaged in debate over competitive issues. Many shippers are of the view that prior consolidations have left large railroads with too much market power, and they seek various remedies to "level the playing field." In our hearing, there were repeated expressions—even from shippers with substantial market power, such as United Parcel Service and General Motors—of the view that the rail industry is becoming too concentrated.

Various remedies were suggested to address this concern about concentration. Some shippers asked us to revisit the issues that we studied in-depth 2 years ago in our proceeding in Review of Rail Access and Competition Issues, STB Ex Parte No. 575. They would like us to change the rules in a variety of ways so as to promote more rail-to-rail competition throughout the industry. But short of a complete overhaul of the existing regulatory system (which the financial analysts and economists testifying at the hearing suggested could introduce an additional level of uncertainty and risk into the industry, thereby harming shippers by lowering aggregate rail investment below those levels necessary for railroads to maintain and improve service), a significant number of shippers stated that we need to adopt new merger rules to ensure that competition will not be curtailed further in the event that the industry seeks to merge itself into a duopoly.

3. *New Merger Rules*.—Thus, for a variety of reasons—some related to service, some related to competition, and some, such as those expressed by Transportation Secretary Slater and representatives of rail employees, related to safety—there was substantial support at our hearing for a broad review of and revision to the rules governing major rail mergers. We agree.

Our existing merger policy guidelines were adopted by the Interstate Commerce Commission soon after passage of the Staggers Act of 1980. At that time, good government required a merger policy that, while recognizing the importance of competition, would encourage railroads to formulate proposals that would help rationalize excess capacity in the industry.

The goals of that merger policy have largely been achieved. It does not appear that there are significant public interest benefits to be realized from further downsizing or rationalizing of rail route systems, as there is little of that activity left to do. Looking forward, the key problem faced by railroads—how to improve profitability through enhancing the service provided to their customers—is linked to adding to insufficient infrastructure, not to eliminating excess capacity.

The testimony convinces us that our rules need to be reexamined. Given the current transportation environment, and with the prospect of a transportation system composed of as few as two transcontinental railroads, we may wish to revisit our approach to competitive issues such as the "one-lump theory" and the "three-to-two" question; downstream effects; the important role of smaller railroads in the rail network; service performance issues; how we should look at the types of benefits to be considered in the balancing test, and how we monitor benefits; how we should view alternatives to merger, such as alliances; employee issues such as "cramdown;" and the international trade and foreign control issues that would be raised by any CN or CP proposal to combine with any large U.S. railroad. As Transportation Secretary Slater pointed out, the sheer size of these potential new mergers poses unique risks and leaves no margin for error: if these mergers were to fail, or lead to service problems, the effects could be devastating for both the rail industry and the shippers that depend on rail service. We must be sure that our merger review process takes these risks into account.

DISCUSSION AND CONCLUSIONS

Accordingly, we have concluded that we must revisit our merger rules, and that in the meantime we must maintain the status quo by directing large railroads to suspend merger activity pending the development of new rules. We understand those parties that argue that each case should be viewed on its own merits without regard to the prospect of future consolidation, but we cannot close our eyes to the fact that the mere consideration of any major merger now would likely generate re-

sponsive proposals that, if approved, could result in a North American duopoly.[10] Before proceeding down that path, we must make sure that we have the appropriate guidelines in place to assure that we can properly assess and fully protect the public interest in each individual case.

In their oral testimony, the CEOs of BNSF and CN recognized the argument that certain new requirements may need to be imposed on future merger proposals, but nevertheless urged us to proceed with consideration of their merger proposal now, developing any new requirements in the context of their application proceeding. We realize that administrative agencies can choose to develop new rules either by rulemaking or in individual adjudications, but in choosing which course to take, we consider what makes sense. Here, it simply makes no sense to attempt to develop new merger rules in the middle of what could likely be the final round of major railroad mergers.[11] New merger rules will be a major undertaking, and we will not know what the rules will look like until the process is over. Yet, under the BNSF/CN approach, we could be reviewing merger proposals involving at least four, and possibly all six, of the large North American railroads before we have had an opportunity to reexamine and reformulate our merger policy. The evidentiary filings in such cases are massive, and yet none of the parties would know what they would be expected to show until new rules are formulated. And then, at the end, once the rules are known, it is not only possible, but quite likely, that the merger process would have to start all over again. Thus, while BNSF and CN may see some benefit to themselves from such a procedure, the process would be inherently uncertain, could lead to substantial instability in the industry, and thus does not represent good government.

There are very serious risks associated with proceeding with individual merger proposals at this time, before we have new rules in place. The disruption that has beset the railroad industry in connection with the last round of mergers could reach unprecedented levels. Carriers whose management should be focused on fixing their service problems would instead be fixated on finding merger partners, defending their proposals, and responding in the regulatory arena to other carriers' proposals. Investors, who have forsaken the railroad industry in favor of businesses that they have come to believe may have more favorable future prospects, could devalue the industry further. And railroads could find it more difficult to finance the capital improvements necessary to provide the better service that is key to their financial revitalization. In short, the already fragile rail industry could be further destabilized.

We understand BNSF/CN's view that holding up their merger application proceeding would itself be viewed negatively by the financial markets as creating uncertainty. We disagree, as we do not see how anything could be more uncertain than moving forward without appropriate rules in place at the beginning to govern the proceeding, particularly at a time when uncertainty already surrounds the rail sector. Furthermore, investors have come to view rail mergers in a less than positive financial light, and we can see proceeding with the BNSF/CN proposal at this time as only adding to that negative environment. In this regard, we should note that there is clearly sentiment within the financial community—from those analysts who closely followed our hearing—that a delay in merger activity, while new rules are developed, would tend to reduce uncertainty for rail investors, help to stabilize rail financial markets, and provide an impetus for increasing rail share prices.[12]

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[10] The CEOs for BNSF and CN have stated that there is no reason why their merger should necessarily instigate any responsive action by any other railroad. But recent history shows otherwise; indeed, the UP takeover of the SP was a response to the BNSF merger. And CEOs of the other major railroads have stated that they would look to future mergers of their own as strategic responses to the BNSF/CN transaction. Indeed, Richard Davidson, CEO of UP, stated that his company strongly considered a merger with CP as a response to the recent CN takeover of the IC, but ultimately concluded that it would be better off focusing on issues other than mergers under the circumstances prevailing at that time. Given the size of the BNSF/CN transaction, we have no reason to doubt the assertions of the CEOs of the major railroads that if it goes forward, they would have no choice but to seek their own merger partners, and that in a short time, we could be faced with the prospect of a North American duopoly.

[11] We should note that the representatives of the Departments of Agriculture and Defense expressed the view that we should permit no major mergers at this time. Moreover, Transportation Secretary Slater urged us to make numerous and potentially complex changes to our merger rules that, if they are to be applied evenly to all future mergers, could not be practically effected in the middle of individual merger proceedings.

[12] For example, a Credit Suisse First Boston Corporation rail stock analyst, in a March 6, 2000 note to investors, stated that our hearing might "provide some upside for the stocks if it appears that the risk of industry consolidation will be pushed further into the future by the Surface Transportation Board." Another analyst, from ING Barings, in a March 14, 2000 note to investors, predicted that the Board would impose a merger moratorium, and that, as a result, "the industry is full of many buying opportunities," including the shares of BNSF. A March 13,

Notwithstanding the serious potential public harms that could result from going forward, BNSF and CN argue that they will suffer if consideration of their merger proposal is delayed.[13] Unless they expect to escape the new rules that will apply to everyone else, however, and to hold other mergers at bay until their own is completed, we do not see how their transaction will not be adversely affected by the disruption that it would produce throughout the industry. BNSF and CN suggest that it is not fair to "penalize" them for the failures of others.[14] But our action here addresses industrywide concerns that involve all railroads (including BNSF and CN), and in any event, should not in any way be construed to be punitive.

Under 49 U.S.C. 11324, we must consider the public interest in addressing rail mergers, taking into account, at a minimum, adequacy of transportation to the public; including other rail carriers in the area involved; competitive effects; financial impacts on the involved carriers; and impacts on employees. In addition, the rail transportation policy set out in 49 U.S.C. 10101 directs us, among other things, to promote safety, efficiency, good working conditions, an economically sound and competitive rail transportation system, and the needs of the public and the national defense. For the reasons we have discussed, we believe that we can best advance all of these objectives by promptly initiating a rulemaking proceeding to adopt new rules, as appropriate, and providing a short period for parties to adjust to the new rules before proceeding with merger proposals. This approach should provide a degree of stability for what is now a very fragile industry and permit vital public interest issues to be addressed on an evenhanded basis for all merger proposals. To go forward with any individual merger proceeding in the meantime would be unfair to customers, carriers, employees, and affected communities, and would disrupt and distract the industry to the detriment of all of the public interest concerns that we are charged with advancing.

We recognize that our action here is unprecedented. But these are not ordinary circumstances, and we see no way of adequately protecting the public interest short of the steps we have outlined here. Congress has directed us to take such actions as are necessary to carry out our statutory mandate, 49 U.S.C. 721(a), and has expressly authorized us to take injunctive-type action to prevent irreparable harm, 49 U.S.C. 721(b)(4).[15] After considering all of the circumstances, as elucidated through our extensive hearings, we find that changes in our merger regulations are nec-

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2000 report by a J.P. Morgan analyst expressed the view that "rail stocks would react positively to" what the analyst believed was a likely "mid-term" (up to 2 years) hold on further mergers. A Donaldson, Lufkin, and Jenrette rail analyst, in a March 14, 2000 note to investors, explained that rampant pessimism has resulted in rail securities that "are selling at near recessionary levels. It is a reversal of some of this pressure that is exactly what we'd expect if we are allowed to gain some sense of the regulatory and structural outlook for the industry as a result of last week's STB hearings." A Morgan Stanley Dean Witter stock analyst, in a March 8, 2000 note to investors, suggested that a decision by the Board to delay the merger process would remove some near-term uncertainty and lead to near-term strength in a number of railroad stock prices, including those of BNSF and CN. Finally, the Chairman and CEO of Wasserstein, Parella & Co., in a March 10, 2000 letter to Chairman Morgan, explained that his firm "feels strongly that allowing the proposed merger to proceed would place the entire industry in jeopardy," since "the specter of another round of rail mergers [at this time], which Wall Street is convinced this transaction will precipitate, will accelerate the flight of capital" from the industry. He concludes that the prospect of moving forward with the BN/CN transaction at this time "is a serious threat to the industry's financial health, well being and long-term prospects."

[13] BNSF and CN also argue that delay will defer the public benefits, such as new single-line service, associated with their merger. But there are various alternatives to merger that can approximate those benefits. Indeed, CN and its partner IC currently participate in an alliance with KCS, a smaller Class I carrier, that provides all parties many of the benefits of a merger. We note that both General Motors and United Parcel Service (two of the largest customers of CN and BNSF), which would presumably reap the largest benefit from the new single-line service these railroads promise, have testified in no uncertain terms that they do not want a merger to go forward at this time, as has KCS, whose CEO stated that the carrier would not survive as an independent carrier if the BNSF/CN proposal is implemented.

[14] We note that the BNSF merger, which was characterized by many, when it was initially proposed, as a manageable "end-to-end" merger, had its own share of integration problems, and there was some testimony at the hearing concerning service issues on the CN/IC system, which has not yet been fully integrated.

[15] The legislative history accompanying section 721(b)(4) explains that the provision "explicitly authorizes the [Board] to issue unilateral emergency injunctive orders to prevent irreparable harm. This power has been asserted and used by the [Interstate Commerce Commission] in the past, although not specifically granted by statute. The Committee intends to confirm the scope of the former ICC power in this regard. . . ." H.R. Rep. No. 311, 104th Cong., 1st Sess. 124 (1995).

essary now and that no major rail merger proposals should be filed, or will be considered, until new merger rules have been established.[16]

This action will not significantly affect either the quality of the human environment or the conservation of energy resources.

It is ordered:

1. Class I railroads are directed to suspend activity relating to any railroad transaction that would be categorized as a major transaction under 49 CFR 1180.2, pending development of new rules by the Board, as outlined in this decision. No filings relating to such a transaction will be accepted for 15 months.

2. This decision is effective on the date of service.

By the Board, Chairman Morgan, Vice Chairman Burkes, and Commissioner Clyburn. Chairman Morgan, Vice Chairman Burkes, and Commissioner Clyburn commented with separate expressions.

Chairman Morgan, commenting:

This decision has been one of the most difficult ones that I have had to make since becoming a member of the Surface Transportation Board and the Interstate Commerce Commission before it. The Board's action here directing the suspension of all rail merger activity for a period of time is particularly difficult for me because, as my record demonstrates, I do not believe that the government should intervene into free market processes without a very good reason for doing so. And I also believe that parties should get fair and expeditious consideration of matters brought to the Board. But the current problems facing the rail sector are so extraordinary that an unprecedented response is necessary. Given the financial and service instability that exists in the rail sector as a result of the most recent round of major railroad consolidations, I cannot in good conscience allow further actions to occur that I believe would run the risk of creating more disruption and instability to the clear permanent detriment of the Nation's transportation system, rail employees, rail customers, and communities across the country.

In this regard, once I decided that a time-out from mergers was necessary, I proposed a 2-year waiting period before merger applications could be filed. I firmly believe that a period of that length is necessary to accomplish all of the goals set forth in the Board's decision. A lesser time, in my opinion, will simply block the BNSF/CN proposal without fully achieving the immediate and lasting stability for which I am striving by taking this unprecedented action. Nevertheless, although a 2-year period would do more to allow a thorough reexamination of our merger rules and would permit the rail sector to adapt to those rules and achieve a firm level of stability before processing any more major rail consolidation proposals, overall our action here is clearly on the right track.

While certain interests have favored moving forward with the proposed BNSF/CN transaction when filed, many others have been opposed to moving forward with any further consolidation at this time, and certainly not until our merger rules are revisited. In balancing all of these concerns in determining what action would be in the greater public interest here, I have focused on the long-term, as well as short-term, effects of our actions, and on my concern about what would be for the greater good of all railroads, rail customers, rail employees and communities across the country. In view of the instability in the rail sector, the great risk of further harm from continued instability and disruption, and the need to promote the greater public good, it is my strong belief that processing mergers at this time and for a significant period thereafter would not be in the public interest.

Vice Chairman Burkes, Commenting:

This decision sets in motion a 15-month rulemaking proceeding to reevaluate the Board's merger guidelines and imposes a suspension on all major merger activity during this period. This upcoming proceeding will be extremely important. Much has changed in the railroad industry in the nearly twenty years since the majority of our current rules were established. I believe that it is long past time to step back and revisit those standards.

The BNSF/CN merger announcement may have triggered this proceeding, but it is long since overdue. However, it is unfortunate that it was not held prior to their announcement. Consequently, in addition to substantive merger rules issues, the application and timing of a rulemaking proceeding have also become issues.

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[16] Accordingly, for the reasons expressed herein, we hereby suspend the "Notice of Intent to File" filed in Canadian National Railway Company, Grand Trunk Western Railroad Incorporated, Illinois Central Railroad Company, Burlington Northern Santa Fe Corporation, and The Burlington Northern and Santa Fe Railway Company—Common Control, STB Finance Docket No. 33842, until such time as new merger rules have been promulgated and the period set forth in this Decision has expired.

In this proceeding, we have established a 15-month period to develop new merger rules. Although this is almost double the period of time associated with the Board's last two major rulemaking proceedings (Ex Parte Nos. 627 and 628), the issues here are significant and complex and will require additional time. Although this proceeding could be completed in a much shorter time period, 15 months should be more than adequate for a thorough review of our merger rules.

Several parties have argued for a longer suspension period or moratorium, i.e., two or more years. I believe this would be much too long of a period of time. After we have issued our final merger rules, there would be a minimum of an additional year before any additional major railroad mergers could be approved. Moreover, the evidence indicates that railroad service has started to improve after the disruptions resulting from the past mergers and it is clear that those problems started long before the BNSF/CN announcement. In addition, a longer period could add to uncertainty for shippers who are considering building or relocating facilities or planning to enter into long term contracts.

In terms of application, I believe that the new railroad merger guidelines should apply to the proposed BNSF/CN merger and all future major railroad mergers. I also believe that, in fairness to BNSF and CN, and to all parties, it is important to resolve these issues in a timely manner.

Commissioner Clyburn, Commenting:

I stated in my opening remarks to Ex Parte 582 that this proceeding could be a defining moment concerning rail consolidation issues. Four full days of listening intently to comments from all sectors of the rail industry has only strengthened this belief. We have heard testimony from large railroads, small railroads, large and small shippers of all types of commodities, rail labor, economists, government agencies and Members of Congress. While diverse ideas regarding how the Board should address future consolidations emerged from the testimony, it was abundantly clear, however, that the time has come for a thorough review of the Board's current merger rules. Some did suggest that we proceed with future consolidation utilizing the same regulatory framework that currently exists, while some others have suggested that we "take a breath" and impose a moratorium on filing merger applications for two years, three years, or an indefinite period of time.

It is clear to me that the rail industry has changed dramatically within the past twenty years since the passage of the Staggers Rail Act of 1980. Rail consolidations have created a new paradigm in which we must now operate. Therefore, I support the Board's decision to institute the 15 month rulemaking process to revise our merger rules and suspend major merger transactions during this time. Others have called for longer periods of time to attempt to address uncertainties—real, perceived, or otherwise. However, my support of the 15 month suspension is based solely on what I believe to be an appropriate time frame in which the Board Members and staff can address, appropriately, the plethora of complex issues the industry currently faces without unnecessarily suspending merger applications. I believe our approach is a reasonable one.

Senator SHELBY. Senator Specter.

Senator SPECTER. Thank you very much, Mr. Chairman, and thank you for deferring for me for a question or two at the outset.

CONRAIL ACQUISITION

Chairman Morgan, you said that you were not satisfied, and then after the words "not satisfied," followed by what you were not satisfied about, at this juncture, what is your view of the desirability? If you had it to do all over again, would you like to see Conrail divided between Norfolk Southern and CSX?

Ms. MORGAN. I would not undo my decision with respect to the Conrail acquisition. I believe that the decision that we made was the right one. There was a full record of support for that acquisition. There were some who did not support it, as you know, but there was an overwhelming record for support, and I believe we made the right decision. We have had integration problems that have resulted in service difficulties for shippers, and the Board has been actively involved in resolving those, in monitoring those and resolving them.

INTEGRATION PROBLEMS

Senator SPECTER. Well, you said there was a full record of support. I would say there was a substantial record for opposition as well. And you talk about integration problems. Are you satisfied with the progress which has been made on those so-called integration problems?

Ms. MORGAN. Well, I wish that we had not had the problems that we have had, but I think now we are at a position where we are seeing service improvement that is sticking. We are seeing more reliable service, more stable service in the East. Is it where I would like it to be? No, not yet. Do I wish that the problems had not occurred? Yes.

Senator SPECTER. It is not where you would like it to be yet. Do you have a time frame as to when you think you could get it to where you would like it to be?

Ms. MORGAN. Well, I think each day I want it to be better than it was the day before, so it is——

Senator SPECTER. Well, that is obvious, but how long is it going to take to work out the problems?

Ms. MORGAN. Well, I think we are at a critical point—we are going into the Fall Peak period now, which is a heavy season in the rail industry, and that will certainly test both systems in terms of whether they are ready to handle the increased traffic. That will occur over the next couple of months, and that will tell us the state of the systems.

I believe both systems going into the Fall Peak are in good shape to handle the Fall Peak. They have done a lot of planning, and we have worked very closely with them, but the test will be the Fall Peak, and that will tell us where the systems stand.

CSX

Senator SPECTER. With respect to this problem about, illustratively, a shipper wants to move freight from Philadelphia to Chicago, and only, say, CSX goes to Pittsburgh, would you support a provision which would require CSX to give a rate, Philadelphia to Pittsburgh, so that the customer might have a choice from Norfolk Southern and CSX from Pittsburgh to Chicago?

Ms. MORGAN. Well, again, that is part of the discussion that we have had here today regarding what my statute would allow me to do, and what customers would like to have happen. The way my statute works now, I do not add a competitor upon demand, and there are shippers who would like that to occur, but that is not the statute that I implement today. If Congress wants that——

SENATE BILL 621

Senator SPECTER. Senate Bill 621, introduced by Senator Rockefeller——

Ms. MORGAN. Yes.

Senator SPECTER [continuing]. Would provide that.

Ms. MORGAN. Yes.

Senator SPECTER. My question to you was, do you think that is a provision which ought to become law?

Ms. MORGAN. Well, I think that what needs to be decided by Congress is whether the changes that that bill would make would lead to the kind of rail network that we will be comfortable with—that is clearly a fundamental change in the policy that we have in place today. Congress made a decision about the policy that we should have. That is what I am implementing. If changes are made in that policy, it will have impacts. There may be winners and losers, and Congress just needs to understand that before it makes its decision.

Senator SPECTER. Well, twice I have tried to get an answer from you as to whether you think that would be a good change. Let me make a third effort.

Ms. MORGAN. Well, I have answered that in the past. If you are asking me, do I with certainty today——

Senator SPECTER. You may have answered it in the past, there may have been discussions before I got here, but I was not here before I got here, and I do not know what you did in the past, and I would like an answer to the simple question, do you think that there ought to be a compulsion for, say, CSX to provide transit from Philadelphia to Pittsburgh so that the customer could have the choice between CSX and Norfolk Southern for the balance of the ride to Chicago.

Ms. MORGAN. If you are asking me, which I think you are, as a general policy matter, every place there is a shipper that is only served by one carrier, one rail carrier, if the policy should be to add another carrier to serve that customer, that is a change in the policy that we have in place today, and if you are asking me, am I certain that that will result in the kind of rail network that we can all be comfortable with, I cannot tell you that I am. I think it requires more study and more careful thought before we make that kind of fundamental change in the Staggers Act. I have testified to that previously, and I am here today to say that.

Senator SPECTER. I take that to be a no.

Ms. MORGAN. It is not necessarily a no. It is——

Senator SPECTER. A tentative no?

Ms. MORGAN. No, it is not a yes.

Senator SPECTER. Well, I thank you for that. That certainly does clarify the matter considerably.

Senator SHELBY. Senator Specter, let me see if I understand what—from, say, Philadelphia to Pittsburgh, you are talking about just back-to-back competition? I do not see anything wrong with that.

Senator SPECTER. Well, Philadelphia to Pittsburgh, as I understand it maybe hypothetically, but I understand it, CSX has the sole line, but from Pittsburgh to Chicago, Norfolk Southern can compete with CSX, so Senator Rockefeller has an idea, and I think it is a good idea, that requires that CSX give a customer a rate. This is a lot like deregulation of electricity, where I was very surprised at the start to hear that electrical companies could come and use somebody else's lines, but that is what is going on in America today, and if CSX has the only line to Pittsburgh, then they get the transit all the way to Chicago, and I would like to see Norfolk Southern in a position to compete from the Pittsburgh to Chicago

line. That is my second choice. My first choice is to have Conrail do it, Senator Shelby.

Senator SHELBY. I remember.

ANTI-COMPETITIVE CONDUCT

Senator SPECTER. But that is my second choice. I believe that I have Ms. Morgan's view on it. Let me ask you one other provision of Senator Rockefeller's bill, which eliminates the requirement that evidence of anti-competitive conduct be produced when the Surface Transportation Board decides a case to allow another railroad access to customer facilities within an area served by the tracks of more than one railroad.

Ms. MORGAN. That is the so-called open access provision. Again, that is in line with my earlier discussion with you. That would be adding competition in a way that I do not believe that the current law provides, and, in fact, the courts have, in reviewing our decisions, clearly stated that we do not implement, at this point, an open access statute. So the statute would need to be changed, if that—obviously if you wanted to get that——

Senator SPECTER. Well, Congress can change it. We all know that. Ms. Morgan, why not structure the system so that you give the customer an opportunity to get competition between Norfolk Southern and CSX from Pittsburgh to Chicago? As long as CSX has the only line from Philadelphia to Pittsburgh, customers are shut out. Why not open up that competitive opportunity from Pittsburgh to Chicago, between Norfolk Southern and CSX?

Ms. MORGAN. Well——

Senator SPECTER. Senator Shelby has asked the question a lot better than I did by five little words: Does current law inhibit competition?

Ms. MORGAN. Well, I can answer both of them——

Senator SPECTER. That is great.

Ms. MORGAN [continuing]. Both of the questions.

Senator SPECTER. Answer mine first.

Ms. MORGAN. When Congress passed the Staggers Act of 1980, it assumed that there would be captive shippers, and as part of the policy determination that it made in reforming how the railroads were regulated, it was assumed that there would be a rate structure that would recognize that there would be captive shippers and competitive shippers.

As part of that, there are certain provisions and policies that lead us to the kinds of decisions that now certain people are uncomfortable with, whether it be the bottleneck decision that you referenced, or opening up terminals without determining whether there is anti-competitive conduct.

Clearly, when Congress made the decision in 1980, it studied it and made the determination that that was the right policy at the time. I think if Congress wants to revisit that policy, that is fine, and my answer to your question earlier is that that review is fine, but certain questions need to be asked and answered comfortably for everyone.

Now, the question you asked, which is, does the statute inhibit competition, I get back to the premise, which is if the premise is that we do not have enough competition unless every person that

is now served by one railroad would be served by two railroads, well then our statute does not provide for that.

If on the other hand people are comfortable that there are "captive shippers," which is what the Staggers Act assumes, then I believe the Board has fulfilled those responsibilities and reflected the competitive policy.

Senator SHELBY. If you are basically interested in competition, which I think that we are, in certain areas you do not have competition, is this not true?

Ms. MORGAN. But again, as I said, when the Congress passed the Staggers Act——

Senator SHELBY. I understand what Congress did, but we are talking about what the reality is.

Ms. MORGAN. Well, again, but then I get——

Senator SHELBY. Before we deregulated the railroads, there had to be, and I was in the House then, and I was on the Commerce Committee, in which we dealt with the Staggers Act, we talked about competition, among other things, and I believe you have to have competition in lieu of regulation. I will take competition in lieu of regulation any day or night, but I believe we have to have competition of some kind—some kind. That is my own opinion.

Senator SPECTER. Before Ms. Morgan answered the last question I asked her a question as to the policy considerations, as to why not give the Pittsburgh to Chicago run competition, and it seems to me that it is very, very sad, and I hope we are able to act on Senator Rockefeller's legislation.

My sense is that we have had way too many problems arising from the division by CSX and Norfolk Southern of Conrail. I think it has not worked out well at all, and I think Congress has to be much more active in making these policy decisions.

If Chairman Morgan would care to review her testimony and go to the thrust of my questions and start looking for a public policy reason, why should CSX have sole control of the Philadelphia to Chicago run, when there could be an arrangement where CSX would have to offer up Philadelphia to Pittsburgh, and then there could be competition. What are the pros and cons, policy-wise?

I would think that the Chairman of the Surface Transportation Board could give us a public policy reason beyond saying, "Well, this is what the Staggers Act did, and if Congress wants to do it, they can do it, and the evidence is not sufficient, and no, that is not a no, but it is not a yes," but besides saying yes or no, I want to figure out what is best for America.

Ms. MORGAN. I am in agreement with you on that.

Senator SPECTER. Okay. Well, take a look at my questions and your answers and see if you might be a little more responsive, but I support what Senator Rockefeller is trying to do, Mr. Chairman, and I again thank you for your vigilance in focusing this hearing on a long, hot afternoon.

Senator SHELBY. Thank you. I have a statement from Senator Bond, who is tied up on another appropriations matter that will be made a part of the record, he is for competition here, as part of this hearing.

Chairman Morgan, in December 1998, you wrote to the Senate Commerce Committee and said that the Surface Transportation

Board does not have the authority to increase competition among railroads. Is this still true?

Ms. MORGAN. Yes, it is, and it follows on some of your questions earlier.

Senator SHELBY. Okay. What additional changes are needed? They would be statutory changes, would they not?

Ms. MORGAN. Yes. Again, getting back to your earlier question.

Senator SHELBY. Could you do it through Board policy, or would you need statutory language?

Ms. MORGAN. Well, as I indicated earlier, we have taken several actions at the Board, which we believe have pushed the statute in the right direction and pushed the limits of the statute, and we have been upheld so far, but, again, if the Congress is interested in adding a competitor where a customer is served by only one railroad, that is a change in policy and that would require a change in the law. That is the gist of the——

Senator SHELBY. I alluded earlier to the GAO's February, 1999——

Ms. MORGAN. Yes.

Senator SHELBY [continuing]. Report, which concluded that 70 percent of shippers surveyed, quote, "Believe that time, complexity, and cost of filing complaints or barriers" often preclude them from seeking rate relief. Is the complaint process broken, Ms. Morgan?

Ms. MORGAN. Well, let me first of all say that we have worked very hard at the Board to streamline the process. We have put deadlines on the process, we have clarified standards, we have resolved cases that have been around longer than they should have.

Senator SHELBY. Does it cost much, though? Is it too laborious a process?

Ms. MORGAN. Well, I think any time you get into a litigious situation, it is unfortunately cumbersome and costly. That is just the nature of the business.

Senator SHELBY. Is there any way you can minimize the costs to reflect the size of the company bringing the complaint? In other words, smaller companies have smaller resources. You know what I am talking about.

Ms. MORGAN. Yes. Well, we have standards that apply to large rate cases and we have standards that apply to small rate cases.

Senator SHELBY. Okay. You are already into that some.

Ms. MORGAN. Right.

Senator SHELBY. Okay. On March 7 through 10 of this year, the Surface Transportation Board, that you chair, held a series of public hearings about major rail consolidations and the future of the rail network. The hearings focused on the board's merger policy and the downstream service effects which Class I railroad mergers have had on rail service.

The Senate Appropriations Committee has included language in this year's appropriation bill that will require the STB to prepare a report, one, that identify the concerns that were raised in the March 2000, hearings; two, details the actions that the Board will take to address those concerns; and three, indicates where the STB lacks the statutory authority to effectively address these concerns.

Will the Board be able to comply with this requirement and provide the merger report to this committee by April 1, 2001?

Ms. MORGAN. Well, the merger rulemaking process is still under way. We will not have issued final rules until June 2001, so it will be difficult for me to report to you before those rules come out about what we are in the process of completing.

Senator SHELBY. Would you report as soon as you can——

Ms. MORGAN. Yes.

Senator SHELBY [continuing]. More than——

Ms. MORGAN. I will be able to do that, yes, if that was the instruction.

Senator SHELBY. Chairman Morgan, the bottleneck decision, the STB's 1999 bottleneck decision allows a railroad to refuse to quote a rate for shipping over a segment of a route where there is competing service available if any part of that total route to be shipped is served by only one carrier.

Why did the STB believe the bottleneck decision was appropriate? Does not this decision have the effect of stifling competition, since shippers may not be able to even get a competing railroad's rate quote? That has baffled a lot of people.

Ms. MORGAN. Yes. I understand that. First of all, let me just say that in that decision we did provide some relief for the shippers. It is not all of what they sought, but we did provide some relief, and we have been upheld, not only on the part where we did not provide what they wanted, but also on the part where we did.

But having said that, we viewed that decision as a balancing of several interests in the statute. We balanced the rate and route initiative that is provided to the railroads under the statute against other interests in the statute, and we have been upheld in that balancing process.

Senator SHELBY. Ms. Morgan, you have been encouraging the railroads to work together toward a privately negotiated railroad industry agreement to deal with access restrictions and other issues that have been raised by the short lines and regional railroads regarding their treatment by the major railroads. We have been talking about this.

Ms. MORGAN. Yes.

Senator SHELBY. As I understand it, the privately negotiated agreement has been in the works for some time, and last month you wrote to the railroads again urging them to refocus on reaching some consensus on these issues. How is the process moving along? Why do you believe that the Class I railroads and short lines will be able to reconcile their differences this time around, when they have not before?

Ms. MORGAN. Well, first of all——

Senator SHELBY. Realistically, where are we?

Ms. MORGAN. Well, first of all, I think it was important that the smaller railroads and the larger railroads did come to an agreement under the umbrella of the Board's directive. That was an important step.

Senator SHELBY. Are you optimistic now?

Ms. MORGAN. I am always optimistic——

Senator SHELBY. I know, but are you optimistic?

Ms. MORGAN [continuing]. Or I would not be in this position.

Senator SHELBY. But in view of what has gone on in the past.

Ms. MORGAN. Well, I think what has gone on in the past is that they have been able to enter into——

Senator SHELBY. Okay.

Ms. MORGAN [continuing]. An agreement, and I am hopeful that that same spirit will lead to further private sector resolution.

Senator SHELBY. Ms. Morgan, lastly, the Staggers Act allows for competition in a rail terminal area by means of either what they call terminal trackage rights or reciprocal switching. Can you cite some instances where an STB decision has required a railroad to grant competing railroad terminal trackage rights or reciprocal switching rights?

Ms. MORGAN. Well, in the——

Senator SHELBY. If so, how successful have they been?

Ms. MORGAN. Well, in the context of the merger proceedings, we have provided for trackage rights relief, and so forth. Outside of the merger context, we have not provided relief. The Board has had a few cases, one case that I remember specifically, where that relief was denied.

SUBCOMMITTEE RECESS

Senator SHELBY. We have a vote on the floor in a few minutes. I appreciate your testimony and I appreciate your indulgence. I am hoping you are going to be able to work out a lot of these problems that we have been hearing today. Thank you. The committee is recessed.

Ms. MORGAN. Thank you.

Senator SHELBY. Thank you.

[Whereupon, at 3:45 p.m., Tuesday, September 12, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

QUESTIONS SUBMITTED TO THE OFFICE OF THE SECRETARY

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

DOT POLITICAL APPOINTEES

Question. Please provide the number of political appointees currently on board funded in the Department of Transportation and Related Agencies appropriations bill at the Department and break them out by agency. In addition, please provide a timetable for filling any of the vacant political positions up to the statutory cap. Please provide a listing of the number of political appointees, grade level and current salary and compare over the last five years.

Answer. Listed below is information on the number of political appointees currently on board funded in the Department of Transportation and related agencies appropriations bill, the timetable for filling vacant political positions, and information for the past five years on the number of political appointees, grade level and current salary.

Department of Transportation Political Appointees

Agency name	*Currently on board as of 4/15/2000*
Office of the Secretary (OST)	48
Office of the Inspector General (OIG)	1
United States Coast Guard (USCG)	
Transportation Administrative Service Center (TASC)	
Federal Aviation Administration (FAA)	6
Federal Highway Administration (FHWA)	7
Federal Motor Carrier Safety Administration (FMCSA)	
National Highway Traffic Safety Administration (NHTSA)	6
Federal Railroad Administration (FRA)	4

Department of Transportation Political Appointees—Continued

Agency name	*Currently on board as of 4/15/2000*
Federal Transit Administration (FTA)	3
Saint Lawrence Seaway Development Corporation (SLSDC)	1
Research and Special Programs Administration (RSPA)	4
Bureau of Transportation Statistics (BTS)	1
Surface Transportation Board (STB)	3
Total	84

DEPARTMENT OF TRANSPORTATION TIMETABLE FOR FILLING VACANT POLITICAL POSITIONS

Title	Recruitment of 4/15/2000	Estimated appt. date
OFFICE OF THE SECRETARY		
Deputy Chief of Staff	Appointment pending final clearances	6/2000
Scheduling/Advance Assistant	Appointment pending final clearances	5/2000
Director of Public Affairs	Appointment pending final clearances	5/2000
Special Assistant (to the Assoc. Dir. For Media Relation/Public Affairs).	Interviewing	6/2000
Special Counsel	Interviewing	8/2000
Assistant Secretary for Aviation and International Affairs.	Nomination pending clearances in White House.	7/2000
Special Assistant (to the A/S for Aviation & International Affairs).	Appointment pending final clearances	5/2000
FEDERAL AVIATION ADMINISTRATION		
Deputy Administrator	Nomination pending Senate confirmation	6/2000
Associate Administrator for Airports	Interviewing	7/2000
FEDERAL HIGHWAY ADMINISTRATION		
Director of Policy	Interviewing	7/2000
Director of Public Affairs	Interviewing	6/2000
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION		
Administrator	Nomination pending clearances in White House.	7/2000
Director, Office of Public and Consumer Affairs.	Interviewing	8/2000
FEDERAL RAILROAD ADMINISTRATION		
Deputy Administrator	Appointment pending final clearances	5/2000
FEDERAL TRANSIT ADMINISTRATION		
Administrator	Nomination pending Senate Confirmation	6/2000
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION		
Deputy Administrator	Interviewing	6/2000

PRESIDENTIAL, SENIOR EXECUTIVE SERVICE NONCAREER, AND SCHEDULE C APPOINTEES AS OF APRIL 15, 2000

Title	Grade	Salary
IMMEDIATE OFFICE OF THE SECRETARY		
Presidential Appointees:		
Secretary	EX–I	$157,000

PRESIDENTIAL, SENIOR EXECUTIVE SERVICE NONCAREER, AND SCHEDULE C APPOINTEES AS OF APRIL 15, 2000—Continued

Title	Grade	Salary
Deputy Secretary	EX–II	141,300
Associate Deputy Secretary	EX–V	114,500
Noncareer SES:		
Chief of Staff	ES–4	130,200
Deputy Chief of Staff	ES–1	115,811
White House Liaison	ES–1	115,811
Schedule C:		
Special Assistant to the Secretary	GS–15	107,207
Special Assistant to the Secretary	GS–15	90,280
Special Assistant to the Secretary	GS–15	87,459
Director for Scheduling and Advance	GS–14	71,954
Special Assistant for Scheduling and Advance	GS–13	62,920
Special Assistant for Scheduling and Advance	GS–13	60,890
Scheduling/Advance Assistant	GS–11	45,572
Director of Drug Enforcement and Program Compliance	GS–15	110,028
Senior Policy Advisor to the Deputy Secretary	GS–15	90,280
Special Assistant to the Associate Deputy Secretary	GS–15	87,459
EXECUTIVE SECRETARIAT		
Noncareer: SES Director, Executive Secretariat	ES–1	115,811
Schedule C: Deputy Director, Executive Secretariat	GS–14	79,148
OFFICE OF CIVIL RIGHTS		
Noncareer SES: Director, Office of Civil Rights	ES–4	130,200
OFFICE OF SMALL AND DISADVANTAGED BUSINESS UTILIZATION		
Noncareer SES: Director, Office of Small and Disadvantaged Business Utilization	ES–2	121,264
OFFICE OF THE CHIEF INFORMATION OFFICER		
Noncareer SES: Chief Information Officer	ES–4	130,200
OFFICE OF PUBLIC AFFAIRS		
Noncareer SES: Deputy Director of Public Affairs	ES–1	115,811
Schedule C:		
Special Assistant to the Director	GS–12	51,204
Associate Director for Media Relations and Special Projects	GS–15	87,459
Associate Director for Speechwriting & Research	GS–15	110,028
ASSISTANT SECRETARY FOR BUDGET & PROGRAMS		
Presidential Appointees: Assistant Secretary for Budget and Programs and Chief Financial Officer	EX–IV	130,200
Noncareer SES: Deputy Assistant Secretary for Budget and Programs	ES–1	115,811
Schedule C:		
Special Assistant and Chief, Administrative Operations Staff	GS–15	110,028
Special Assistant	GS–14	71,954

PRESIDENTIAL, SENIOR EXECUTIVE SERVICE NONCAREER, AND SCHEDULE C APPOINTEES AS OF APRIL 15, 2000—Continued

Title	Grade	Salary
ASSISTANT SECRETARY FOR GOVERNMENTAL AFFAIRS		
Presidential Appointees: Assistant Secretary for Governmental Affairs	EX–IV	122,400
Noncareer SES:		
Deputy Assistant Secretary for Governmental Affairs	ES–2	121,264
Director, Office of Congressional Affairs	ES–1	115,811
Schedule C:		
Deputy Director, Office of Congressional Affairs	GS–15	110,028
Special Assistant	GS–14	74,352
Senior Congressional Liaison Officer	GS–15	110,028
Senior Congressional Liaison Officer	GS–14	74,352
Director, Office of Intergovernmental Affairs	GS–15	98,744
Associate Director, Office of Intergovernmental Affairs	GS–14	88,741
Intergovernmental Liaison Officer	GS–12	51,204
GENERAL COUNSEL		
Presidential Appointees: General Counsel	EX–IV	122,400
ASSISTANT SECRETARY FOR ADMINISTRATION		
Schedule C: Special Assistant to the Deputy Secretary	GS–15	111,713
ASSISTANT SECRETARY FOR TRANSPORTATION POLICY		
Presidential Appointees: Assistant Secretary for Transportation Policy	EX–IV	122,400
Noncareer SES:		
Deputy Assistant Secretary for Transportation Policy	ES–3	126,825
Deputy Assistant Secretary for Transportation Technology Policy	ES–3	126,825
Schedule C:		
Policy Advisor	GS–15	110,028
Special Assistant (to the Deputy Asst. Secretary for Transportation Policy)	GS–12	51,204
Special Assistant (to the Asst. Secretary for Transportation Policy)	GS–15	95,923
ASSISTANT SECRETARY FOR AVIATION AND INTERNATIONAL AFFAIRS		
Noncareer SES: Deputy Assistant Secretary for Aviation & International Affairs	ES–4	130,200
OFFICE OF INSPECTOR GENERAL		
Presidential Appointees: Inspector General	EX–IV	130,200
FEDERAL AVIATION ADMINISTRATION		
Presidential Appointees: Administrator	EX–II	141,300
Noncareer SES:		
Chief Counsel	ES–4	130,200
Assistant Administrator for Policy, Planning and International Affairs	ES–3	126,825
Assistant Administrator for Public Affairs	ES–3	126,825
Assistant Administrator for Government and Industry Affairs	ES–4	130,200

PRESIDENTIAL, SENIOR EXECUTIVE SERVICE NONCAREER, AND SCHEDULE C APPOINTEES AS OF APRIL 15, 2000—Continued

Title	Grade	Salary
Schedule C: Deputy Assistant Administrator for Government and Industry Affairs	GS–15	110,028
FEDERAL HIGHWAY ADMINISTRATION		
Presidential Appointees: Administrator	EX–II	141,300
Noncareer SES:		
Associate Administrator for Policy	ES–4	130,200
Chief Counsel	ES–4	130,200
Schedule C:		
Special Assistant	GS–14	76,750
Special Assistant to the Director of External Communications	GS–15	90,280
Staff Assistant	GS–13	62,920
Special Assistant	GS–14	76,750
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION		
Noncareer SES:		
Deputy Administrator	ES–1	115,811
Chief Counsel	ES–3	126,825
Schedule C:		
Director of Intergovernmental and Congressional Affairs	GS–15	93,101
Special Assistant	GS–13	64,949
Chief, Consumer Information Division	GS–15	95,923
Special Assistant	GS–15	93,101
FEDERAL RAILROAD ADMINISTRATION		
Presidential Appointees: Administrator	EX–III	130,200
Noncareer SES: Associate Administrator for Policy and Program Development	ES–4	130,200
Schedule C:		
Director, Office of Public Affairs	GS–15	98,744
Senior Advisor to the Administrator	GS–15	95,923
FEDERAL TRANSIT ADMINISTRATION		
Noncareer SES:		
Deputy Administrator	ES–4	130,200
Chief Counsel	ES–4	130,200
Associate Administrator for Budget and Policy	ES–3	126,825
SAINT LAWRENCE SEAWAY DEVELOPMENT CORPORATION		
Presidential Appointees: Administrator	EX–IV	122,400
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION		
Presidential Appointees: Administrator	EX–III	130,200
Noncareer SES: Director of Program and Policy Support	ES–1	115,811
Schedule C:		
Senior Advisor	GS–15	84,638

PRESIDENTIAL, SENIOR EXECUTIVE SERVICE NONCAREER, AND SCHEDULE C APPOINTEES AS OF APRIL 15, 2000—Continued

Title	Grade	Salary
Senior Advisor	GS–15	90,280
BUREAU OF TRANSPORTATION STATISTICS		
Presidential Appointees: Director	EX–V	114,500
SURFACE TRANSPORTATION BOARD		
Presidential Appointees:		
Chairman	EX–III	130,200
Board Member	EX–IV	122,400
Board Member	EX–IV	122,400

NUMBER OF POLITICAL APPOINTEES 5 YEAR COMPARISON CHART

	4/15/00	9/30/99	9/30/98	9/30/97	9/30/96	9/30/95
OST	48	44	42	39	41	44
OIG	1	1	1	1	.....	1
USCG	.....	.....	.....	.....	.....	.....
TASC	.....	.....	.....	.....	.....	N/A
FAA	6	6	7	7	10	10
FHWA	7	9	6	3	8	10
FMCSA	.....	N/A	N/A	N/A	N/A	N/A
NHTSA	6	7	8	5	4	5
FRA	4	4	4	4	5	4
FTA	3	4	4	5	4	6
SLSDC	1	1	.....	.....	1	.....
RSPA	4	4	4	3	4	4
BTS	1	1	.....	1	.....	2
STB	3	3	3	3	6	N/A
TOTAL	84	84	79	71	83	86

EGYPT AIR TRAGEDY AND THE ALASKA AIRLINES FLIGHT 261 TRAGEDY

Question. Please describe the Office of the Secretary's involvement in the response to the Egypt Air tragedy and the Alaska Airlines flight 261 tragedy? Include in the description the incremental cost to the department of that involvement.

Answer. The Office of Aviation Enforcement and Proceedings has program responsibility for enforcing airline compliance with the Aviation Disaster Family Assistant Act, Foreign Air Carrier Family Support Act, and the Department's Passenger Manifest Rule. Accordingly, that office made inquiries regarding carrier compliance with those requirements immediately upon learning of the respective tragedies and its review in one case continues. As of April 15, 2000, that office had devoted approximately 20 hours of GS–15 attorney time and 2 hours of SES attorney time toward its compliance efforts in those cases, which equates to an incremental cost of $1,179.

CONSULTING SERVICE

Question. On page 8 of the justification, please provide details on the consulting service for the General Counsel's Office.

Answer. To carry out Departmental responsibilities under the Accessibility for All America initiative, consultants will be needed to B (1) supplement in house staff in conducting complex investigations concerning alleged Air Carrier Access Act (ACAA) violations in a manner similar to that used by the Civil Rights Division of the Department of Justice in Americans with Disabilities Act (ADA) cases; (2) act as expert witnesses, not available inside the government, to testify in enforcement pro-

ceedings; and (3) develop and operate a clearinghouse to facilitate consumer outreach activities. It should be noted that under section 707 of the recently-enacted Wendel H. Ford Aviation Investment and Reform Act for the 21st Century the Department is required, among other things, to investigate each disability-related complaint it receives against any airline and conduct outreach efforts, including the dissemination of appropriate technical assistance manuals, to provide guidance to airlines and disabled passengers in understanding their respective rights and responsibilities under the ACAA.

OFFICE OF THE SECRETARY TRAVEL COSTS

Question. Please provide details on the Office of the Secretary travel costs that are anticipated to be paid by the modes.

Answer. No travel in the Office of the Secretary is anticipated to be paid by other modes.

S&E TASC EXPENSES

Question. Please provide the details on $7.355 million OST contribution to TASC.

Answer. The estimate under the Salaries and Expenses appropriation is composed of: $927,000 for OST operational share of the Docket System; $570,000 for the cost of various activities coordinated through the Chief Information Office (CIO) and $5,858,000 requested under the Assistant Secretary for Administration for the balance of OST's administrative expenses which are assessed to OST as a portion of the TASC bill. The composition of the administrative expenses that paid for under the Assistant Secretary for Administration includes: worklife wellness, facilities service center, information services, space management, security operations, information systems management consulting, telecommunication services, acquisition services, and human resource services.

S&E CONTRACT COSTS

Question. Please provide details on other anticipated contract cost in the Office of the Secretary.

Answer. The majority of the offices that are funded within the Salaries and Expenses Appropriation have costs which are coded to the "Other Services" object class. This object class captures many types of charges that are for everyday kinds of purchases such as subscriptions and training. The majority of the $10,002,000 though is associated with contracts and reimbursable agreements. These items are described throughout the OST narrative justifications. The requested contracts include everything from funding Departmental IT Architecture in the CIO's office ($1,100,000) to reimbursing FTA for OST's accounting services ($950,000).

STAFFING IN THE OFFICE OF INTERMODALISM

Question. Please provide details on total current on-board personnel and costs related to the Office of Intermodalism.

Answer. Listed below are the total on-board personnel and fiscal year 2000 salaries related to the Office of Intermodalism:

Title	Grade	Salary
Associate Deputy Secretary and Director, Office of Intermodalism	ES–5	$114,500
Deputy Director	ES–3	126,825
Program Analyst Officer	GS–15	110,028
Senior Transportation Specialist	GS–15	95,923
Special Assistant to Director	GS–15	87,459
Transportation Specialist—Planning	GS–13	81,546
Transportation Specialist—Freight	GS–13	71,954
Senior Office Assistant	GS–12	59,758
Scheduling Advance Assistant	GS–11	45,572
Secretary	GS–9	38,840

The total fiscal year 2000 administrative costs associated with personnel in the Office of Intermodalism are as follows:

Personnel Costs and Benefits	$935,218
Travel Budget	51,500
Other Services	5,922

Supplies and Materials	1,750
Total Fiscal Year 2000 Administrative Costs	994,390

In fiscal year 2001, it is requested that this office be funded at $1,317,000 under the Federal Highway Administration's Federal-Aid Highways account.

OFFICE OF INTELLIGENCE AND SECURITY

Question. Does every cabinet office have an Office of Intelligence and Security? Please describe the corresponding capability in other cabinet offices to the degree it exists.

Answer. Most, but probably not all Cabinet offices have an Intelligence Office, but all have a Security Office or Director. Those departments with national security responsibilities, and especially those whose interests are threatened by terrorist actions, have a direct need for current intelligence. Additionally, departments such as Transportation, which are directly involved in international negotiations, require the continuous, time-sensitive intelligence reporting provided by the Office of Intelligence and Security (OIS)

Question. How are travel advisories transmitted to the public: which agencies develop the advisory and which transmit the travel advisories?

Answer. The Department of Transportation maintains a telephone travel advisory line [800–221–0673] to provide notice of threats to transportation systems and the traveling public worldwide. The Office of Intelligence and Security also issues a Transportation Security Information Report (TSIR), as needed, on a variety of issues relating to transportation, but these reports are not specifically travel advisories. The TSIR is developed by OIS and transmitted by email to the department's operating administrations through the Security Working Group (SWG). The SWG in turn sends the TSIR to their field elements and modal security officials by email or fax.

Question. The budget justification describes the Office of Intelligence and Security as the Secretary's primary representative to the intelligence and law enforcement communities. Please discuss the relationship between the substantial and corresponding capabilities in the Federal Aviation Administration and the Coast Guard to the intelligence and law enforcement communities.

Answer. The FAA and USCG each have routine and on-going liaison and exchange with the intelligence and law enforcement communities. Those relationships focus on the individual aviation and maritime security requirements of those agencies, but do not address the broad range of all the other modes of transportation. The Aviation Security Improvement Act of 1990 (ASIA >90) specifically identified the need to raise the level of attention that these transportation security matters received to the Office of the Secretary.

Question. Please describe the current reimbursable or detailee support of the Office of Intelligence and Security.

Answer. Current reimbursable support include one representative from the Central Intelligence Agency and five Coast Guard detailees.

Question. Please detail the level of travel by the Office of Intelligence and Security that is paid for by appropriations to the Coast Guard or the Federal Aviation Administration.

Answer. There is no travel by the Office of Intelligence and Security that is paid for by appropriations to the Coast Guard or the Federal Aviation Administration.

Question. Does the FAA and the Coast Guard also support compliance efforts with ASIA 90, or is that solely the responsibility of the Office of Intelligence and Security?

Answer. The implementation of ASIA >90 is a joint effort between FAA and OIS. The USCG has no compliance requirements related to ASIA >90.

Question. Does the FAA and the Coast Guard also support industry directed efforts to address specific information-related protection issues?

Answer. Other than for regulatory purposes, neither the FAA nor the Coast Guard support industry directed efforts to address specific information-related protection issues.

Question. Doesn't the FAA and the Coast Guard have similar costs to those outlined in the Office of Intelligence and Security justification for funding required to update the intelligence division's method of access to classified material at CIA?

Answer. Yes, the FAA is making a similar transition to upgrade their classified access and OIS has worked with them and the intelligence community to provide a cost effective solution to both organizations. USCG already has a more robust capability through their military requirements, but is also required to upgrade their systems in keeping with a change in the Intelink and CTLink systems.

Question. Do any other offices or modes have costs related to the critical infrastructure protection initiative outlined on page 18 of the OST justification? What other modes and offices are involved in this initiate?

Answer. No other offices or modes have costs specifically related to the critical infrastructure protection initiative outlined on page 18 of the OST justification. The $900,000 requested is to continue threat and vulnerability assessments of critical transportation information systems, develop systems to rapidly disseminate and share vulnerability and threat information, and develop and establish an information sharing and analysis center (ISAC) in cooperation with the Sector Coordinator as mandated by PDD–63. The vulnerability assessments will begin with the nation's rail information and communication systems and eventually move on to the rest of the nation's critical transportation infrastructures. These analyses will build upon those physical vulnerability assessments already completed. No other modes are conducting comprehensive vulnerability and risk analyses in the same effort or manner as OST/OIS. Modal administrations are instead focusing on protecting their own mission critical systems, with the exception of RSPA as described below. In addition, other modes may be conducting awareness training for personnel to enhance security awareness internal to their modes; however, none are working with the private sector on a Vulnerability Awareness and Education Program as directed by PDD–63 for the Transportation Infrastructure as a whole.

The Research and Special Programs Administration requests $3.4 million in fiscal year 2001 for a new Transportation Infrastructure Assurance R&D. Of this $3.4 million, $1 million will be used for Intermodal Terminal Security in support of the Department to develop and demonstrate technologies, concepts and procedures for improving the security of intermodal freight and the network upon which it travels. This includes conducting threat assessments of the transportation's physical and information infrastructure at selected ports and facilities to develop "test beds" as platforms for demonstration of security concerns related to intermodal transportation. This effort is particular to certain ports and facilities and those threats and vulnerabilities associated with them; it does not involve a comprehensive vulnerability and risk analyses of the information systems of any one critical transportation system as a whole.

Question. Do any other offices or modes have costs related to the chemical/biological agent detection initiative outlined on page 18 of the OST justification? What other modes and offices are involved in this initiative? Could this initiative be handled centrally by either the FAA or the FTA or could the OST participation be funded by reimbursable arrangement with either or both the FAA and /or FTA?

Answer. The Research and Special Programs Administration (RSPA) research and development budget contains $2M for detection of chemical and biological agents. The RSPA request was developed in conjunction with OIS, and does not overlap it. RSPA's request is focused on research into advanced detection technologies, while OIS's is focused on test and evaluation of detectors already developed for other applications. OIS's proposal offers the highest probability of identifying readily deployable detectors in the shortest period of time. Existing detection technologies, however, typically reflect DOD requirements—e.g., open field detection with a relatively high tolerance for false alarms. The enclosed nature of transportation terminals combined with high probability of disruption (and even danger) associated with false alarms in this environment indicate the need for substantial testing and, perhaps, some development work to optimize promising technologies.

Question. In the new or expanded initiatives for the CIO, $900,000 is slated to the CIO involvement in securing IT systems. In addition, $900,000 is slated in the Office of Intelligence and Security for continuing "the assessment of critical transportation information systems. . ." If the CIO can do the job for the same amount as it takes the office of Intelligence and Security to continue to evaluate, would not the effort be better handled by one office or, alternatively, by the individual modes specifically maintaining such systems? In short, what office has primary responsibility for this effort and what is the Department's strategy for addressing the security of critical transportation information systems?

Answer. The CIO's request for $900,000 is strictly for securing internal DOT IT systems. The Office Intelligence and Security's request for $900,000 is for IT vulnerability assessments of transportation systems that DOT does not own but requires to ensure a thorough evaluation of the national transportation infrastructure. DOT has already completed the physical portion of the assessment. The more difficult vulnerability and threat assessments of critical information systems remains to be completed, as well as the need to develop systems to rapidly disseminate and share threat information with the private sector. As directed by PDD–63, The Director, Office of Intelligence and Security has been designated by the Secretary of Transportation to serve as the Sector Liaison Official.

INCREASED BANDWIDTH

Question. The CIO justification details $15,000 for increased bandwidth. What is the out year funding requirement for providing the necessary improvements to the existing infrastructure at OST?

Answer. The cost to increase bandwidth is a one-time cost. Therefore, there will be no additional out year funding requirements associated with the $15,000 request for increased bandwidth.

TRAVEL MANAGEMENT SYSTEM

Question. What deficiency and what capability does the new travel management system described on page 29 that is not covered by the old system?

Answer. The activity described on page 29 relates to routine upgrades and help desk support needed to maintain the existing travel management system until it is replaced by a new system. Consequently, this does not refer to a particular deficiency in the old system, but continued maintenance. Since the contract for the existing system expires this fiscal year, DOT plans to conduct a formal solicitation to determine whether there are alternative systems available to offer streamlined travel management support at a reasonable cost.

INFLATION UNDER THE ASSISTANT SECRETARY FOR ADMINISTRATION

Question. What are the costs that are inflated on page 30 of the justification?

Answer. The other costs that were increased for inflation under the Assistant Secretary for Administration include such items as rent, contracts and supplies and materials. Inflation of $179,000 in other costs and the $1,000 in travel costs was calculated at 1.4 percent.

EMPLOYEE DEVELOPMENT COSTS

Question. How were the employee development costs detailed on page 31 of the justification covered in fiscal year 2000?

Answer. One of the goals of DOT is to invest at least 2 percent of payroll in employee development. The $1.6 million represents the additional amount needed for OST to achieve this level of investment. In the past employee development was not a separate line item, and in fiscal year 2000 funds for employee development were included as a part of Other Services, e.g., Acquisition Training, payments to TASC, administrative and management services. In fiscal year 2000, employee development costs were minimal with only $31,900 specifically identified for training.

ELECTRONIC POSTING

Question. How were the electronic posting costs covered detailed on page 31 of the justification covered in fiscal year 2000?

Answer. There were no resources available for this activity in fiscal year 2000. Fiscal year 2001 will be the first year for this activity.

REIMBURSABLE POSITIONS

Question. What positions are slated for reimbursement on page 30 of the justification and what is the justification for using reimbursement as opposed to direct appropriation for those positions?

Answer. The composition of the reimbursable positions included on page 30 consist of 11 positions which support the Consolidated Personnel Payroll Management Information System (CPMIS), the Integrated Personnel and Payroll System (IPPS), and the Management Information Reporting System (MIR). These are Departmental systems and the operating administrations share in the costs based on population serviced. Prior to January 2000, this function was housed in the Transportation Administrative Service Center (TASC). The transfer of this function from TASC to the Office of the Secretary was necessary due to a Congressionally imposed limitation contained in the FAA's section of the fiscal year 2000 Department of Transportation Appropriations Act that limits FAA's obligations for TASC services. In addition to these positions, there are seven other reimbursable positions located within the Administrative Law Judges Office which are primarily supported by the Federal Highway Administration, the Federal Aviation Administration and the Research and Special Programs Administration. The Administrative Law Judges Office facilitates transportation-related cases for the three operating administrations.

WORKFORCE IMPROVEMENTS

Question. What are the workforce improvement initiatives included in the $21,000 request on page 33 of the justification?

Answer. The workplace improvement initiatives for fiscal year 2001 will focus on worklife improvements and labor management partnerships. Worklife programs continue to be a source of employee satisfaction and increased productivity and in order to maintain and enhance our program, funding is required to communicate to employees the various worklife options available at DOT. Approximately $6,000 is needed for development and publication costs of worklife materials including a telecommuting guide "Everything You Need to Know about Telecommuting" and a Leave Administration Handbook. In order to inform employees throughout the country of worklife programs, a satellite broadcast is planned which will focus on the administration and delivery of childcare programs. The projected cost of the broadcast is $6,000. In the area of partnership, in fiscal year 1999 and fiscal year 2000 the Department completed Phase I and II of the labor-management climate assessments along with a DOT Labor Relations Strategic Plan. The resultant action plan will focus on integrating those into a labor-management partnership handbook as well as providing site-specific assistance and training across DOT. Costs associated with these efforts will be approximately $9,000.

EMPLOYEE DEVELOPMENT

Question. Please outline the employee development goals and deliverables associated with the request on page 33 of the justification. If the framework was developed in 1997, what additional work needs to be done in this area? Is this initiative focused specifically on OST employees, and if not, what funding is requested for the modes implementation of the framework?

Answer. As the Department prepares for tomorrow's workforce through workforce planning, it is essential that we invest in the development of new employees who will replace those who retire, and that we prepare the remaining workforce to master changing conditions so that they can do the jobs of tomorrow as well. This investment in learning will include identifying and developing options for using technology to enhance learning and skill development, and it will be used to create an information resource integrating distance learning into an array of training options. Funds will be used to support employees in getting the necessary competencies identified during the workforce planning process and to apply learning to individual and organizational performance.

The Learning and Development Framework promotes a standard, ONE DOT method of addressing learning and development activities and contains a comprehensive explanation of DOT policies, standards, and requirements associated with result-oriented learning. In order to fully embrace the intent of this Framework, DOT must create a culture that places a high value on skillful employees, managers and leaders, and we must make the necessary investment to do so. Such a culture is not, at present, universally established at DOT.

CONTRACTUAL RENTAL PAYMENTS

Question. What are the actual contract or anticipated costs for the rental payments detailed on page 35 of the justification?

Answer. Based on monthly General Services Administration fees charged to government agencies to cover costs associated with government-leased office space, the anticipated contractor costs for rental payments will total approximately $319,000.

PUBLIC AFFAIRS AND S&E TRAVEL

Question. What are the travel costs outlined on page 36 of the justification used for? What is the consolidated OST travel request? Why is it not advisable to appropriate one lump sum for OST for OST travel rather than appropriating individual travel allotments to the individual offices in OST?

Answer. When the Secretary travels, he needs Public Affairs support to place Secretarial appearances and to handle logistics. He also needs on-site Public Affairs support in arranging briefings for media interviews while on travel. Finally, he needs on-site Public Affairs support during his travels to serve as a link to the OST Headquarters Public Affairs Office and the public affairs offices in the agencies.

As shown on page S&E 7 of OST's justification, the S&E account request for travel totals $636,000. This does not include various amounts requested under the TPR&D account, the Office of Civil Rights, the Minority Business Outreach or under the Essential Air Service and Rural Airport Improvement Fund accounts. The Office of the Secretary has not requested individual travel allotments in each OST office.

The request is for a consolidated appropriation. The budget only displays the plans per office as requested by the Subcommittee.

OFFICE OF CIVIL RIGHTS

Question. Please discuss why travel is the most efficient means of processing investigations by the Office of Civil Rights and the selection process by which claims would be identified for in-person investigation by the office.

Answer. Obtaining testimony through face-to-face interviews provides the best results and ensures that investigations are legally sufficient, technically adequate and completed in a timely manner. Less expensive techniques such as telephone interviews and the exchange of written interrogatories through the mails significantly reduce the quality and timeliness of the investigative process.

DOCR's six Regional Directors determine which claims are to be investigated on-site and which claims are to be processed using "desk investigation" techniques. Generally, the more simple, single issue-single basis complaints can be processed using "desk investigation" techniques, which include telephone interviews, interrogatories through the mails, etc. The more complex, multiple issue-multiple bases complaints will usually be processed through on-site investigations. Also, those claims that present unique, precedent-setting or sensitive matters, such as sexual harassment and hostile work environment allegations, are best processed through on-site investigations.

Question. How is the current work load slated to be covered by the proposed contract mediators being handled (page CR–7 of the justification)?

Answer. The proposed contract mediators are being handled in the same manner as our collateral duty mediators. The Equal Employment Specialist who will manage our Alternative Dispute Resolution (ADR) Program will determine when mediation is appropriate. The first option will be to use our own collateral duty mediators. However, since there are currently 1,150 active formal complaints, we do not anticipate that our collateral duty mediators will be able to handle all the requests for mediation. We would then turn to contract mediators to handle the remaining requests for mediation.

Question. What is the training request for the Office of Civil Rights investigators?

Answer. In November 1999, the EEOC issued new requirements to the Federal Sector Discrimination Complaint Processing Regulations, 29 C.F.R. 1614. The recent regulatory changes affected all aspects of the internal EEO complaint process, requiring that DOT's internal policies and procedures governing discrimination complaint processing be revised. Therefore, receiving training to stay abreast of these new requirements is essential for our investigators. In addition, the Office of Civil Rights will hold an annual Civil Rights Investigators' training conference to remain current on the recent regulatory changes, to update technical compliance skills and knowledge, and to review internal DOT compliance policies and procedures. The training request will also be used for professional development and to attend EEOC Technical Assistance Seminars to update the investigators on the latest developments and changes to the Federal Sector Discrimination Complaints Processing Regulations, 29 C.F.R. 1614, et al.

Question. What part of the $500,000 for automated tracking systems outlined on page CR–7 of the justification is to buy new systems?

Answer. None of the $500,000 is to buy new systems. The $500,000 will be used as follows: $350,000 will be used for the enhancement/expansion of the three current tracking systems, i.e., the internal Case Management System (CMS), the Disadvantaged Business Enterprises (DBEs) Appeals System, and the external case tracking system (XTRAK); $100,000 will be used for a System Administrator to maintain the three automated tracking systems; and, $50,000 will be used for the Section 508 Compliance Project, which requires DOCR to be in compliance with Section 508 of the Rehabilitation Act of 1973.

Question. What is the pre-complaint stage noted on page CR–7 of the justification for CMS? When was CMS procured, installed and operational? What capability is the Office of Civil Rights seeking that it currently lacks in the request for CMS?

Answer. Regulations promulgated by the Equal Employment Opportunity Commission require that the pre-complaint stage (also known as the "informal stage") of the EEO process be satisfied before an aggrieved person files a formal complaint. The complainant must contact an EEO Counselor in the relevant Operating Administration (OA) and participate in the pre-complaint process during which attempts could be made to resolve the concerns raised. The CMS was developed, installed, and operational during fiscal year 1996. Currently, CMS tracks only the formal complaint process, which begins after the pre-complaint/informal stage and ends prior to the post-determination (EEOC/legal) stage and access to the system are available

only by DOCR, which is responsible for the formal complaint process. Thus, CMS does not provide a single data source for tracking and monitoring the entire EEO complaint process. The fiscal year 2001 enhancement to CMS will create a comprehensive EEO case management system that will save time, cut costs, and improve the efficiency of the EEO process by expanding the scope to incorporate both the pre-complaint stage (including Alternative Dispute Resolution) and post-determination (EEOC/legal) stages and allowing data input, access, and report generation by the Operating Administrations civil rights and legal offices.

Question. How is system administration currently being handled for the three automated tracking systems for the Office of Civil Rights?

Answer. Currently, limited system administration functions are handled by a limited staff resource. The Office of Civil Rights does not have the staff resources necessary for a system administrator to provide dedicated support for technical assistance, to correct problems, and to generate reports.

Question. Has the Department explored funding a DOT civil rights web site by reimbursable agreement with the modes or having the largest civil rights case generator in the Department provide an umbrella web site for the Department?

Answer. Yes, we have explored this concept with the modes. The Office of Civil Rights is anticipating that once this basic web-site is operating that the modes will then contribute to sophisticated improvements to the web-site, which would greatly enhance communications among the civil rights offices.

Question. Why is the request for final agency decision writing flat while every other request for the office anticipates a growing workload? Does the Department anticipate that a low percentage of final decisions will be forthcoming from the anticipated higher caseload?

Answer. On November 9, 1999, the U. S. Equal Employment Opportunity Commission (EEOC) revised the Federal Sector Discrimination Complaint Processing Regulations, 29 C.F.R. 1614. One key change made to the regulations delegated to EEOC Administrative Judges the authority to issue final decisions following an administrative hearing. Prior to this change, Administrative Judges could only issue recommended decisions to agencies, who would then issue final agency decisions adopting, amending or rejecting the recommended decisions. Considering this change, we anticipated that a greater number of complainants would opt to have their cases heard and decided by an EEOC Administrative Judge rather than request that the agency issue a final agency decision. Thus, we projected that there would be fewer final agency decisions written by the agency.

Question. What was the aggregate Office of Civil Rights travel request for fiscal year 1998, fiscal year 1999, and fiscal year 2000? What is the aggregate Office of Civil Rights travel request for fiscal year 2001?

Answer. The Office of Civil Rights travel request was $141,000 in fiscal year 1998, $186,000 in fiscal year 1999, $195,000 in fiscal year 2000 and $278,000 in fiscal year 2001.

Question. What obsolete equipment is slated for replacement on page CR–9?

Answer. The Office of Civil Rights plans to spend approximately $50,000 on replacing obsolete and unserviceable office equipment. Several regional offices will be replacing copier machines and computer equipment that they have had since 1995. Investigators will need replacement laptop computers for their off-site interviews. Headquarters anticipates the need for replacement equipment as well.

MINORITY BUSINESS OUTREACH

Question. What are the requested FTE and travel funds anticipated for the office of Minority Business Outreach?

Answer. The Minority Business Outreach (MBO) line of business within the Office of Small and Disadvantaged Business Utilization (OSDBU) requested $3 million dollars for fiscal year 2001 for contractual support to assist small, women-owned, Native American and other disadvantaged business firms in securing contracts and subcontracts resulting from transportation-related Federal support. It also supports partnerships under cooperative agreements with minority educational institutions (comprised of historically black, Hispanic and Native American colleges and universities), trade associations, and chambers of commerce.

No FTE's are requested for this activity. $75,000 in travel funds are requested in fiscal year 2001 the same level as fiscal year 2000. The requested travel funds are for staff to monitor and manage the Office's three main lines of business: Advocacy, Outreach and Financial Services and to participate in various small and disadvantaged business enterprise (S/DBE) conferences and seminars. The funding also provides funds for transportation for the Minority Business Resource Center (MBRC) Advisory Committee meetings which are held annually.

DEPARTMENT WIDE ADVISORY COMMITTEE TRAVEL

Question. What funds are requested for advisory committee travel department wide? Please break out this cost by individual advisory committee?

Answer. The estimated fiscal year 2001 cost for advisory committee members' travel, is as follows:

Advisory Council on Transportation Statistics	$4,000
Aviation Rulemaking Advisory Committee	4,500
Commercial Fishing Vessel Safety Advisory Committee	43,000
ITS-America	30,000
Merchant Marine Personnel Advisory Committee	25,000
Minority Business Resource Center Advisory Committee	4,800
National Boating Safety Advisory Council	35,000
Navigation Safety Advisory Council	28,000
Adv. Board to the St. Lawrence Seaway Development Corp	11,500
Technical Hazardous Liquid Pipeline Safety Committee	9,500
Technical Pipeline Safety Standards Committee	11,000
Marine Transportation	200,000
Great Lakes Pilotage	15,000
Total	421,300

Note: This travel estimate is included under DOT's total planned advisory committee request of $1,133,100.

TPR&D OTHER ADMINISTRATIVE COSTS

Question. Doesn't requesting the "other administrative costs" detailed on page TPR&D to be funded through TASC shift that costs to the modal administrations and OST indirectly rather than reflecting those costs as part of the TPR&D budget? If this mechanism is appropriate for "other administrative costs," isn't it equally appropriate for the entire cost of TPR&D?

Answer. No shifting of TASC costs to the modal administrations or OST indirect payments were reflected in the request. Administrative costs within the TPR&D budget are divided into three categories as shown on page TPR&D–6. They are Personnel Compensation & Benefits, TASC Payments, and Other Administrative Costs. The "other administrative costs" as detailed on page TPR&D–19 have nothing to do with the TASC provided services of printing, graphics, facilities management, etc., but rather are other direct costs of travel, supplies, subscriptions, and equipment used in direct support of TPR&D funded personnel, studies and projects.

RURAL TRANSPORTATION INITIATIVE

Question. Please provide copies of any white papers or other products developed by the Policy Office resulting from the leadership described on pages TPR&D–10 and 11 of the justification relating to the Rural Transportation Initiative.

Answer. Attached are copies of the Secretary of Transportation's Serving Rural America Rural Transportation Initiative dated May 1999, the U.S. Department of Transportation Serving Rural America Rural Program Guide, and Rural Transportation, An Annotated Bibliography, February 1999, prepared jointly by USDA and the Department.

[CLERK'S NOTE.—The above mentioned materials can be found in the subcommittee files.]

MODERNIZATION OF AVIATION DATA SYSTEMS

Question. Why is the modernization of aviation data systems requested in OST (page TPR&D B 17) as opposed to being the responsibility of BTS?

Answer. OST is the most intensive analytical user of aviation data within the Department. As such, OST depends heavily upon aviation data to administer all of its aviation responsibilities. Some of the current data systems date back to the pre-deregulation era and do not adequately reflect the present environment within the U.S. and international aviation industries. Because of their intensive use of the data and their constant awareness of aviation issues, OST users are in the best position to determine what new data or data changes are needed to provide them with the critical information necessary to administer the Department's aviation programs. At the same time, OST is working closely with BTS, the Administrator of the aviation databases, to ensure that the transition to the new aviation data environment will be effective and efficient.

DOCKET MANAGEMENT SYSTEM

Question. Why is the full text search capability being requested as an appropriation as opposed to being incorporated as a cost to be allocated to the users of the system? Wouldn't the primary beneficiaries of such a capability be the legal representatives of the industry seeking to support or oppose various proceedings related to the filings?

Answer. The Department of Transportation requests full-text search capability for the DMS as an appropriation because it does not have the statutory authority to levy user fees for system usage.

In addition, the beneficiaries are much more than just the legal representatives of industry. DMS experienced over 1.6 million on-line hits in fiscal year 1999. Those using the DMS include large manufacturers; transportation providers; state and local governments; labor organizations; community planners; and safety, environmental and other public interest groups. It is also important to note that people who could make effective use of this service include DOT employees, other Federal agency employees, and Congressional staff. DMS provides these customers with easy and convenient opportunities to fully participate in DOT rulemaking and adjudicatory processes. Better participation means that more effective public policy decisions are made.

OVERFLIGHT USER FEES

Question. How much revenue has been collected from overflight user fees to date in fiscal year 2000? Has the Department re-estimated the anticipated revenues from these fees for fiscal year 2000 or 01 due to this experience?

Answer. The Department has not collected any user fees to date. The Department has not re-estimated the anticipated revenues at this time. The FAA still anticipates collecting $5 million in fiscal year 2000 and $22.1 million in fiscal year 2001 as shown in the budget request.

ESSENTIAL AIR SERVICE EMPLOYEE EXPENSES

Question. Please provide a salary and administrative cost history for the EAS program for the past five fiscal years.

Answer.

	Fiscal years—				
	1997	1998	1999	2000	2001
Personnel Compensation	.....	710	767	800	840
Benefits	.....	140	112	117	125
Travel	.....	10	15	6	15
Other services	.....	5	67	140	220
Supplies and materials	.....	10	15	2	10
Equipment	.....	10	17	5	10
Total	.....	885	993	1,070	1,220

COMMUTER RULE

Question. What has the "commuter rule's" impact on EAS service provider fleet mix done to the cost of providing EAS service subsidy?

Answer. It is difficult to isolate with precision the effects of the Commuter Safety Rule on subsidy costs as the airline industry is a very dynamic one. However our best analysis is that there are basically three ways in which the effects come into play. First, the additional costs of training, hiring additional personnel such as pilots, mechanics, dispatchers, trained weather observers, etc. are legitimately passed on to the EAS program in the form of higher unit costs with no concomitant increase in revenues. Thus the contracts for currently subsidized EAS communities require increased subsidy when they come up for renewal.

Second, The commuter rule and the resulting higher operational costs, have forced carriers serving about 10 communities that had previously served them on a subsidy-free basis to file notice to suspend those subsidy-free services. In those cases we must prohibit the carrier from suspending service and compensate it for any losses that it can document.

Finally, the higher level of safety mandated by the "commuter rule" has forced the rapid retirement of the 19-seat aircraft, mainly the Beech 1900, and the Fairchild Metro II and Metro III aircraft. Since newer replacement aircraft are much more expensive to acquire and operate, this has resulted in fewer carriers participating in the EAS program.

AIRLINE OPERATIONS AT LOVE FIELD

Question. On February 1, 2000, the United States Court of Appeals for the Fifth Circuit upheld Departmental orders holding that operations at Love Field in Dallas, TX, are governed by the Wright and Shelby Amendments and not by local agreements. As a result, nonstop service in any size aircraft can be operated at Love Field to points in Mississippi, Alabama, and Kansas and jets with 56 or fewer seats can be operated from Love Field to any destination. Considering the history of litigation brought against any party attempting to offer service at Love Field:

I hope that the Department will continue its actions to halt any further interference with flights authorized by Federal law. Are you proceeding to prevent any additional state court challenges? What is the status of the Federal court proceeding?

Considering the behavior of those dominating this market, are you closely monitoring actions that they may take to drive competitors out of Love Field? Will you act quickly to address all forms of anti-competitive behavior directed at these new operations?

Now that the Court of Appeals has confirmed that jets with 56 seats or less can operate from Love Field to any destination, will you take the appropriate steps to ensure that new carriers at Love Field can operate to all airports within the United States?

What would you estimate that it has cost the American taxpayer to enforce the Federal laws concerning airline service at Love Field?

Answer. The Department intends to continue its efforts to block interference with the Love Field flights authorized by Federal law. At the Department's request, the Justice Department filed a Federal district court suit against the City of Fort Worth and American Airlines to block them from using on-going state court proceedings to stop airlines from operating longhaul Love Field flights. The Justice Department recently filed motions for summary judgment and a permanent injunction against the defendants in this case. In the Federal court case, Fort Worth has asked the Supreme Court to review the Fifth Circuit decision. The Dallas-Fort Worth International Airport Board and American are also likely to seek Supreme Court review. The Government will vigorously oppose these petitions. American and Fort Worth have represented that they will not seek to block the longhaul Love Field services authorized by Federal law while the Supreme Court is considering the petitions for review.

The Department will be monitoring American Airlines' competitive responses to new service at Love Field. The Department will address any anti-competitive behavior directed at new Love Field services. The Department is firmly committed to assuring that all airlines have a fair opportunity to compete in the marketplace while avoiding any unnecessary interference with vigorous competition.

As noted, the Department has taken steps to ensure that airlines can operate the Love Field services authorized by Federal law and will take further action if necessary.

The Department is unable to provide an estimate of the cost of enforcing the Federal laws governing Love Field service that would be useful. The Department does not record the time spent by employees on different projects. Estimating the cost would be difficult because several employees in different offices of the Department were involved in the enforcement efforts, as were attorneys from two different divisions of the Justice Department.

ALLEGED ANTI-COMPETITIVE PRACTICES

Question. The Committee is advised that in May of 1999 information was submitted to the Department of Transportation by AirTran Airlines alleging that anti-competitive practices are being directed against the airline at its Atlanta hub and elsewhere. AirTran requested that the Department exercise its authority by conducting a review of these allegations. Please advise whether that review has been initiated and, if so, what the status of that review is currently.

Answer. To improve our understanding of the issues raised by AirTran, we have had discussions with AirTran and Delta representatives, and have conducted an extensive informal review of Delta's competitive responses to AirTran's operations at

Atlanta. As part of its ongoing review process, the Department has requested Delta provide information in response to questions about specific conduct.

DOT'S PERFORMANCE AND BUDGET LINKAGE

Question. How are the agency's annual performance goals linked to the agency's mission, strategic goals, and program activities in its budget request?

Answer. The Department's performance planning process fully links the agency's annual performance goals to its mission, strategic goals, and program activities in its budget request. The following hierarchical model is used by the Department to link activities to outcomes based upon agency mission and strategy: Mission—Strategic Goal—Strategic Outcome—Performance Measure—Annual Performance Goal—Program Activity. The following illustration demonstrates this linkage. The Department's basic enabling law, codified at 49 U.S.C. 101(a), includes safety as a core Departmental mission; thus transportation safety is one of the five overall Departmental strategic goals. Six strategic outcomes provide more specific expressions of how this strategic goal will be achieved—one of which is "Reduce the number of transportation-related deaths." An array of performance measures supports this general strategic outcome; and several operating administrations within the Department worked to achieve these measures. For example, NHTSA, FHWA, FMCSA, FAA, and Coast Guard, worked together on an array of programs to encourage safer operator behavior, safer vehicle technologies, safer transportation infrastructure, and better safety response systems. Achievements for a specific fiscal year are established as annual performance goals for these organizations, to chart their performance relative to these performance measures. In the fiscal year 1999 DOT Performance Report, provided to Congress on March 31, 2000, an appendix arrayed operating administration program activities by strategic goal, displaying how requested budgetary resources linked to each. This information, and separate operating administration performance plans, became an integral part of the justification material in the office of the secretary's and operating administrations' budget requests for fiscal year 1999, and in subsequent years since.

Question. Could you describe the process used to link your performance goals to your budget activities?

Answer. At the beginning of the budget formulation process, the Secretary meets with top management from all of the operating administrations. Funding initiatives proposed by the operating administrations are evaluated and prioritized based on their relative contribution toward meeting the Department's outcome goals. The highest priority initiatives are included in the Department's annual budget request to OMB. It should be noted that the Department's performance goals are to a large extent outcome goals. As such, one goal is supported by many budget activities. For example, our goal to reduce highway fatalities and injuries is supported by the programs of the National Highway Traffic Safety Administration and the Federal Motor Carrier Safety Administration, safety funding and highway infrastructure improvements by the Federal Highway Administration and safety messages delivered by all Departmental leaders.

Question. What difficulties, if any, did you encounter, and what lessons did you learn?

Answer. The major difficulty encountered in introducing a performance-based budget process was in changing the Department's overall thought process in producing budget justifications that explain not just what an operating administration plans to do with the resources requested, but also describes expected results to be achieved according to specific agency performance goals. This budget process has been used for the last two years and the quality of the analysis has improved significantly in this second year. A key lesson is that it takes time and constant attention to make performance budgeting work.

DOT'S PERFORMANCE MEASURES AND BUDGET LINKAGE

Question. Does the agency's Performance Plan link performance measures to its budget?

Answer. Yes. Appendix II of the Department's fiscal year 2001 Performance Plan contains a summary table of estimated obligation amounts for each operating administration, and program activities within each administration's budget request.

Question. Does each account have performance measures?

Answer. Yes. Please refer to the notes at the end of Appendix II to DOT's fiscal year 2001 Performance Plan.

DOT'S PERFORMANCE PLANNING AND BUDGET STRUCTURE

Question. To what extent does your performance planning structure differ from the account and activity structure in your budget justification?

Answer. The account and activity structure in the budget varies by operating administration, but generally it is not organized by outcome area but rather by grouping similar kinds of activities, or activities with a common funding mechanism. Given the relationship between program activities and outcomes—multiple programs promote single outcomes and single programs promote multiple outcomes—perfect alignment is not possible. Improvements in the existing structure will be recommended as it becomes apparent that they would be useful.

Question. Do you plan to propose any changes to your account structure for fiscal year 2000?

Answer. The fiscal year 2000 budget proposed, and Congress approved, consolidation of two Federal Railroad Administration accounts into a new Safety and Operations account. This change better reflected the nature and the interrelationships of the existing Office of the Administrator and Railroad Safety accounts. This is reflected in DOT's fiscal year 2001 Performance Plan, Appendix II.

Question. Will you propose any changes to the program activities described under that account structure?

Answer. No.

DOT PERFORMANCE MEASURES AND DATA

Question. How were performance measures chosen?

Answer. Performance measures were chosen to provide the information needed to determine if DOT programs are achieving the desired strategic outcome goals. Data availability was also a consideration. If developing a database for a candidate performance measure appeared to require excessive cost and time, an alternative measure was selected.

Question. How did the agency balance the cost of data collection and verification with the need for reliable and valid performance data?

Answer. The cost of data collection and verification was one of the factors considered in selecting performance measures. DOT's hope is to incrementally improve data so that cost can be minimized over time.

Question. Does your plan include performance measures for which reliable data are not likely to be available in time for your first performance report in March 2000?

Answer. DOT's performance report/plan uses established data systems for most of its performance information. Most of these systems can provide preliminary results that are both timely and sufficiently accurate for communicating in our GPRA Program Performance Report. The number of measures without data is minimal. The Department has data for 97 percent of its 1999 measures. The remaining 3 percent consisted of three performance goals for which data were not available in time for the first performance report. The states and the Environmental Protection Agency provide the data for these three goals (pavement condition, highway congestion and mobile source emissions). In last year's "dry run" report, the Department had data for only 63 percent of its goals. The "dry run" taught valuable lessons about where data problems existed, allowing the Department to target the areas of most concern and ensure their readiness for March 2000.

KEY DOT PERFORMANCE GOALS

Question. What are the key performance goals from your fiscal year 1999 Annual Performance Plan that you recommend this subcommittee use to track program results?

Answer. The answer to this question must be prefaced with the observation that all DOT Performance Plan performance goals and measures are important, since they broadly represent many additional performance goals and measures in each of the eleven departmental operating administrations. The following subset of fiscal year 1999 Performance Plan output or outcome measures are important in tracking overall DOT performance toward the five strategic goals:

Safety.—Transportation-related fatalities (outcome); Transportation-related injuries (outcome); and Transportation Incidents (outcome).

Mobility.—Highway Pavement Condition (output); Highway Congestion (outcome); Aviation Delay (outcome); Impediments to Port Commerce (outcome); Amtrak Ridership (outcome); and Transit Ridership (outcome).

Economic Growth and Trade.—Flight Route Flexibility (output); and International Air Service (outcome).

Human and Natural Environment.—Mobile Source Emissions (outcome); Wetland Protection and Recovery (output); Aircraft Noise Exposure (outcome); Maritime Oil Spills (outcome); and Hazardous Material Spills (outcome).

National Security.—Sealift Capacity (outcome); Coast Guard Military Readiness (output); and Drug Interdiction (outcome).

Critical Infrastructure Protection (output—not established as a measure until fiscal year 2000, but added due to its enduring importance in providing a proper answer to this question).

Question. For each key annual goal, indicate whether you consider it to be an output measure ("how much") or an outcome measure ("how well").

Answer. As explained in detail in each major subdivision of DOT's fiscal year 1999 Performance Report, and as assessed by the General Accounting Office (see its report to the Senate Committee on Commerce, Science, and Transportation, and House Committees on Transportation and Infrastructure (GAO/RCED–98–180R), the majority of DOT's performance goals are outcome-oriented. Furthermore, each performance goal and related performance measure is rationally related to eventual achievement of longer-term strategic goals or objectives. See the previous question for how each key measure is characterized.

Question. State the long-term (fiscal year 2003) general goal and objective from the agency Strategic Plan to which the annual goal is linked.

Answer. Please refer to the following table. [Attachment 1]

Attachment 1

STRATEGIC GOAL: SAFETY

Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

Outcome Goal	*DOT-Wide and Other Indicators*
Reduce the number of transportation-related deaths.	▪ Total number of transportation-related fatalities, with a CY 1995 baseline of 44,407. ▪ Percentage of highway fatalities that are alcohol-related. ▪ Number of fatalities involving large trucks. ▪ Number of recreational boating fatalities. ▪ Percentage of front occupants using seat belts. ▪ Number of fatal general aviation accidents.
Reduce the number and severity of transportation-related injuries.	▪ Total number of transportation-related injuries, with a CY 1995 baseline of 3,494,965. ▪ Number of injured persons involving large trucks.
Reduce the rate of transportation-related fatalities per passenger-mile-traveled and per ton-mile of total freight shipped (or vehicle miles traveled).	▪ Total number of transportation-related fatalities per 100 million passenger-miles-traveled, with a CY 1995 baseline of 1.026. ▪ Total number of transportation-related fatalities per 100 million ton-miles shipped, with a CY 1995 baseline of 0.168. ▪ Fatalities per 100 million vehicle miles of travel. ▪ Fatal aviation accidents (U.S. commercial air carriers) per 100,000 flight hours. ▪ Rail-related fatalities per million train-miles. ▪ Transit fatalities per 100 million passenger miles traveled
Reduce the rate and severity of transportation-related injuries per passenger-mile-traveled and per ton-mile (or vehicle miles traveled).	▪ Total number of transportation-related injuries per 100 million passenger-miles-traveled, with a CY 1995 baseline of 81.606 ▪ Total number of transportation-related injuries per 100 million ton-miles shipped, with a CY 1995 baseline of 3,620. ▪ Injured persons per 100 million vehicle miles of travel. ▪ Transit injured persons per 100 million passenger miles traveled
Reduce the number of reportable transportation incidents and their related economic costs.	▪ Total number of reported transportation incidents, with a CY 1995 baseline of 6,732,003. ▪ Number of serious hazardous materials incidents in transportation. ▪ Number of pipeline incidents caused by outside force damage.

STRATEGIC GOAL: MOBILITY

Shape America's future by ensuring a transportation system that is accessible, integrated, efficient, and offers flexibility of choices.

Outcome Goal	Performance Indicator
Improve the structural integrity of the transportation system.	▪ Percent of National Highway System pavement with acceptable ride quality. ▪ Percent deficient bridges on the National Highway System. ▪ Percent of airport runway pavements in satisfactory condition. ▪ Percent availability of marine aids to navigation. ▪ Percent availability of locks and related navigation facilities of the St. Lawrence Seaway. ▪ Average condition of bus and rail transit fleet.
Balance new physical capacity with the operational efficiency of the nation's transportation infrastructure.	▪ Assessment of integration for Intelligent Transportation Systems (ITS) in metropolitan areas. ▪ System capacity attributable to airport infrastructure at the 50 busiest airports. ▪ Number of intercity and commuter trains scheduled in congested segments of Washington DC/Boston corridor. ▪ Amtrak customer satisfaction index (CSI).
Increase intermodal physical, information, and service connectivity.	▪ Number of identified impediments to the flow of commerce through ports and terminals.
Increase access to the transportation system for the movement of all people and freight.	▪ Percent of transit facilities that are Americans with Disabilities Act compliant. ▪ Number of aviation landing approaches using GPS technology.
Provide preventive measures and expeditious response to natural and man made disasters in partnership with other agencies to ensure that we provide for the rapid recovery of the transportation system.	▪ Hours of delay per 1,000 vehicle miles traveled on Federal-aid highways

STRATEGIC GOAL: ECONOMIC GROWTH AND TRADE

Advance America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

Outcome Goal	*Performance Indicator*
Reduce the average time for delivery of people, goods, and services to their destinations	▪ Percent of flight operations safely flown off ATC-preferred routes. ▪ Amtrak trip-time between New York and Boston.
Improve the reliability of the delivery of people, goods, and services to their destinations.	▪ Days critical waterways are closed due to ice
Reduce trade barriers, support economic deregulation, and promote competition in domestic and international markets in transportation-related services.	▪ Number of passengers (in millions) in international markets with open aviation agreements
Improve the U.S. international competitive position by facilitating the export of domestic transportation goods and services.	▪ Gross tons of commercial vessels under construction in U.S. shipyards.
Accelerate desirable, sustainable, and cost-beneficial regional and local economic development through major transportation investments.	▪ Miles of the Appalachian Development Highway System completed
Increase the education and public awareness of individuals in transportation-related fields.	▪ Number of transportation related degrees awarded by university programs sponsored by DOT. ▪ Number of students reached by the Garrett A. Morgan Technology and Transportation Futures program.
Expand opportunities and promote economic growth for all businesses, especially by encouraging and assisting small, women-owned, Native American and disadvantaged businesses to participate in DOT and DOT-assisted contracts and grants.	▪ Percent of dollar value DOT contracts awarded to women-owned businesses and small disadvantaged business, in accordance with statutory goal. ▪ Number of employment sites that are made accessible by Job Access and Reverse Commute transportation services.

STRATEGIC GOAL: HUMAN AND NATURAL ENVIRONMENT

Protect and enhance communities and the natural environment affected by transportation.

Outcome Goal	Performance Indicators
Improve the sustainability and livability of communities through investments in transportation facilities.	▪ People living within .25 miles of transit stops offering service frequency of 15 minutes or less.
Reduce the amount of transportation-related pollutants and greenhouse gases released into the environment.	▪ Mobile source emissions. ▪ Rate of oil spills by maritime sources. ▪ Average quantity of liquid hazardous material spilled from pipeline. ▪ Average quantity of liquid hazardous materials spilled from all modes except pipeline. ▪ Metric tons (in millions) of carbon equivalent emissions from transportation sources
Improve the natural environment and communities affected by DOT-owned facilities and equipment.	▪ Percentage of DOT facilities identified for clean-up that need no further action.
Reduce the adverse effects of siting, construction and operation of transportation facilities on the natural environment and communities, particularly disadvantaged communities.	▪ Number of residents exposed to significant aircraft noise (65dB or higher). ▪ Ratio of wetland replacement resulting from Federal-aid highway projects. ▪ Time to resolve environmental justice complaints.
Improve the condition of our living marine resources.	▪ Observed compliance with Federal fisheries regulations.

STRATEGIC GOAL: NATIONAL SECURITY

Advance the nation's vital security interests in support of national strategies such as the National Security Strategy and National Drug Control Strategy by ensuring that the transportation system is secure and available for defense mobility and that our borders are safe from illegal intrusion.

Outcome Goal	*Performance Indicator*
Reduce the vulnerability and consequences of intentional harm to the transportation system and its users.	▪ Detection rate for weapons and explosives in airports. ▪ Of those who need to act, percent that receive threat information within 24 hours.
Ensure readiness and capability of all modes of commercial transportation to meet national security needs.	▪ Intermodal capacity available. ▪ Merchant Mariners available for mobilization.
Ensure transportation physical and information infrastructure and technology are adequate to facilitate military logistics during mobility, training exercises, and mobilization.	▪ Percentage of strategic port facilities available when requested.
Maintain readiness of resources including operating forces and contingency resources owned, managed, or coordinated by DOT necessary to support the President's National Security Strategy and other security-related plans.	▪ Percent of Ready Reserve Force ships that are available in the time required and percentage of days they are mission-capable while under DOD control. ▪ Percent of designated Coast Guard units that meet required readiness level.
Reduce flow of illegal drugs and of illegal aliens entering the United States.	▪ Percent success rate of illegal drug smugglers in non-commercial maritime routes. ▪ Percent success rate of undocumented migrants by maritime routes.

DOT OUTCOME MEASURES AND MANAGING FOR RESULTS

Question. In developing your Annual Performance Plan, what efforts did your agency undertake to ensure that the goals in the plan include a significant number of outcome measures?

Answer. The agency makes a decision at the beginning of each fiscal year's performance planning process to use outcome measures wherever possible. Output measures are used only if a good outcome measure for a strategic outcome goal cannot be identified.

Question. Do you believe your program managers understand the difference between goals that measure workload (output) and goals that measure effectiveness (outcome)?

Answer. Yes. The Department of Transportation has made great strides over the past several years in ensuring that program managers focus on outcomes.

Question. What are some examples of customer satisfaction measures that you intend to use? Please include examples of both internal and external customers.

Answer. The Department has identified customer service management as one of its key Corporate Management Strategies in its Performance Plan, and is currently developing a customer satisfaction measurement program. When it is implemented, it will measure both internal and external customer satisfaction. Some of the customer groups that will be included in the measurement program include the traveling public, transportation workers, grant recipients, and DOT information users.

DOT PERFORMANCE BUDGETING

Question. How were the measurable goals of your fiscal year 1999 Annual Performance Plan used to develop your fiscal year 1999 budget?

Answer. Program performance was considered throughout the budget formulation process for the Department's fiscal year 1999 budget. For example, the Department requested $975 million—an 18 percent percent increase—for aviation safety programs, including initiatives designed to help achieve the Department's goal of reducing aviation fatalities by 80 percent by 2007. And the Administration's ambitious goals for drug interdiction, based on two years of record level seizures by the Coast Guard, were reflected in the increased funding requested for Coast Guard's operating expenses. These are programs with demonstrated successes, and specific expected levels of performance in fiscal year 1999.

Question. If a proposed budget number is changed, up or down, by this committee, will you be able to indicate to us the likely impact the change would have on the level of program performance and the achievement of various goals?

Answer. Yes. For each of the last two years, the Department has submitted revisions to its goals based on appropriations action.

DOT PERFORMANCE MANAGEMENT

Question. Do you have the technological capability of measuring and reporting program performance throughout the year on a regular basis, so that the agency can be properly managed to achieve the desired results?

Answer. In some cases we do and in others we don't. In the instances where we rely on data reported by states, it is more difficult and costly to receive performance data on a regular basis.

Question. If so, who has access to the information—senior management only, or mid- and lower-level program managers too?

Answer. To the extent that information is available, it is available to multiple management levels. The best examples can be found in the two largest operating agencies of the Department: FAA and Coast Guard. Operating data are garnered and aggregated at intervals throughout the fiscal year, and are visible by managers throughout both organizations.

Question. Are you able to gain access easily to various performance-related data located throughout your various information systems?

Answer. Unfortunately, no. See Appendix I to DOT's fiscal year 1999 Performance Report and fiscal year 2001 Performance Plan.

DOT BUDGET ACCOUNT STRUCTURE

Question. The Government Performance and Results Act requires that your agency's Annual Performance Plan establish performance goals to define the level of performance to be achieved by each program activity set forth in your budget. Many agencies have indicated that their present budget account structure makes it difficult to link dollars to results in a clear and meaningful way. Have you faced such difficulty?

Answer. Generally, no. In general, DOT's and operating administrations' budgetary accounts and program and financing schedules are sufficiently straightforward for properly relating funding to performance. To the degree that issues arise, it is generally where one activity creates progress toward multiple outcomes. For instance, an investment in transportation infrastructure has impacts not only on mobility, but also in safety, and economic growth. Another example is found in investments in capital equipment for the Coast Guard, where ships, aircraft, and command and control investments contribute to many different outcomes.

Question. Would the linkages be clearer if your budget account structure were modified?

Answer. At this point, the Department does not recommend making changes in the budget account structure. But, as the Department continues to evolve and refine overall long-term strategy and annual performance plans, it may become apparent that changing some aspect of the Department's budget account structure will allow more efficient operations, and greater simplicity and clarity in presenting resource requests to Congress, and in reporting performance results from those investments.

Question. If so, how would you propose to modify it and why do you believe such modification would be more useful both to your agency and to this committee than the present structure?

Answer. See the previous answer.

Question. How would such modification strengthen accountability for program performance in the use of budgeted dollars?

Answer. See the previous answer.

LINKING PERFORMANCE MEASUREMENT SYSTEMS TO FINANCIAL SYSTEMS

Question. Spending significant resources on performance measurement systems appears to be a wasteful exercise if this information is not linked to: (1) real data about what it costs to perform various government functions; and (2) how to allocate agency resources to perform these functions. Could you comment on your agency's cost accounting expertise and plans to link GPRA to the budget process?

Answer. The majority of cost accounting expertise at DOT resides within the individual modal administrations. For example, FAA is in the process of developing a cost accounting system, which will be fully implemented by 2002. As a new departmental accounting system is installed over the next few years, it will significantly enhance DOT's managerial cost accounting capability. The new system will enable DOT's modal administrations to apply cost accounting standards to specific functions.

Question. Under one of the new accounting standards recommended by the Federal Accounting Standards Advisory Board (FASAB) and issued by OMB, this year for the first time all federal agencies are required to have a system of Managerial Cost Accounting. The clearly preferred methodology for such a system, as stated in that standard, is the one known as "Activity-Based Costing," whereby the full cost is calculated for each of the activities of an agency. What is the status of your agency's implementation of the Managerial Cost Accounting requirement, and are you using Activity-Based Costing?

Answer. DOT is aggressively implementing a new financial management system known as "DELPHI" which contains Activity Based Costing functionality. Current implementation plans are that the last operating administration will be converted to DELPHI in June, 2001. During fiscal year 2002, the department will able to fully implement this new functionality to improve overall departmental financial and performance management systems.

Question. Will you be able in the future to show to this committee the full and accurate cost of each activity of each program, including in those calculations such items as administration, employee benefits, and depreciation?

Answer. Yes.

Question. By doing so, would we then be able to see more precisely the relationship between the dollars spent on a program, the true costs of the activities conducted by the program, and the results of these activities?

Answer. Yes. But it is also important to remember that DOT largely has outcome, not output, goals. Many variables may affect the achievement of these goals. DOT does not in all cases control all the variables that influence program outcomes and therefore does not always have complete control over the ultimate achievement of the department's strategic goals or objectives.

Question. Will you be able to show us the per-unit cost of each activity and result?

Answer. DOT will be better able to show the per-unit cost of activity inputs. Cost of achieving results is more difficult to pin down, since many of DOT's partners and

stakeholders have influence equal to or greater than the department in achieving strategic goals or objectives.

Question. To what extent do the dollars associated with any particular performance goal reflect the full cost of all associated activities performed in support of that goal? For example, are overhead costs fully allocated to goals?

Answer. In most cases, program and modal overhead costs are reflected in the dollars associated with specific performance goals. For example, $449 million is requested for the maritime search and rescue program, to help achieve the Department's goal of saving at least 85 percent of all mariners who are in imminent danger. This sum includes operating expenses; acquisition, construction and improvements; and research and development, as well as an allocated portion of the Coast Guard's administrative expenses for staff functions such as procurement, personnel, legal, and executive leadership of the organization. Overall, about 98 percent of the estimated obligations for fiscal year 2001 are considered part of the direct program level, and are allocated based on the primary purpose of the program. The remaining two percent are indirect costs, including primarily Coast Guard retired pay, FAA staff offices for operations, and OST salaries and expenses.

PERFORMANCE PLANNING AND REGULATORY REFORM

Question. Please identify any significant regulatory reform measures that have been put in place by your agency in conjunction with the development of the agency's performance plan.

Answer. The Department is committed to improving the rulemaking process and to minimizing the regulatory burden on the transportation community. This commitment is documented in the Corporate Management Strategies section of the performance plan and report. In 1999, the Department implemented electronic participation in rulemaking and met with industry and the general public to identify what could be done to improve the rulemaking process. These efforts will continue in fiscal year 2000 and 2001.

EXTERNAL INFLUENCES ON DOT PERFORMANCE

Question. Does your fiscal year 1999 performance plan—briefly or by reference to your strategic plan—identify any external factors that could influence goal achievement?

Answer. Yes.

Question. If so, what steps have you identified to prepare, anticipate and plan for such influences?

Answer. Although DOT cannot control its operating environment, by clearly identifying the factors that need to be considered in developing and implementing programs, managers are prepared to meet the challenges presented. For example, one external factor that is expected to have a significant influence on transportation is the growth of the elderly population. This is being considered by DOT management in the selection of initiatives that focus on ways to make travel for this group safer and easier, e.g., easier to read signing, changes in passenger boarding and alighting time for aviation, rail and transit vehicles.

Question. What impact might external factors have on your resource estimates?

Answer. External factors can have a significant impact on resource estimates. For example, a major environmental catastrophe—such as a hurricane, earthquake or oil spill—could significantly impact resource requirements.

PROGRAMMATIC OVERLAP OR DUPLICATION

Question. Through the development of the Performance Plan, has the agency identified overlapping functions or program duplication?

Answer. No. The authorization and appropriations structure of the department and its operating administrations are such that no duplication or overlap exists. However, the Department has closely evaluated responsibilities where coordination is necessary. An example of this is the recent program evaluation on hazardous materials.

Question. If so, does the Performance Plan identify the overlap or duplication?

Answer. See previous question.

MANAGEMENT CHALLENGES AND PERFORMANCE REPORTING

Question. Should agencies address management challenges and potential duplication and overlapping functions in their GPRA plans, and if so, how?

Answer. Yes. DOT has gone to great lengths to integrate the department's and operating administrations' approach to addressing management issues in conjunc-

tion with achieving strategic objectives. In the few areas where results have not met expectations, the Department is undertaking reviews of performance strategies and will find better ways to achieve stated outcomes.

AGENCY DECISIONMAKING

Question. To what extent has GPRA been used by agency leadership to guide decision-making?

Answer. DOT has a history of using performance measurement in managing programs, particularly measures of the safety, condition, and performance of the transportation system. GPRA has expanded the use of performance measures and has led to two key advances: the integration of program performance measures into a single DOT performance plan, and a closer linkage of performance measures to the budget process. For example, NHTSA has tied individual program performance to intermediate outcomes, e.g., increasing seat belt use; and to overall outcomes, e.g., reducing fatalities and injuries. These "top level" outcomes are also integrated into the Department's Performance Plan. Budget justifications, in turn, have used performance measures to justify the allocation of resources and the specific results that programs seek.

Question. Will this use increase in the future and if so, in what ways?

Answer. As DOT employees gain more experience in managing for results, and in linking resources to outcomes, the thought processes underpinning the Results Act will become more a part of daily activity. As a result, overall DOT performance is expected to continuously improve.

AGENCY PERFORMANCE AND THE APPROPRIATIONS PROCESS

Question. Future funding decisions will take into consideration actual performance compared to expected or target performance. Given that: to what extent are your performance measures sufficiently mature to allow for these kinds of uses?

Answer. The department has devised the best set of performance measures based on current knowledge of which departmental activities and outputs most strongly influence progress toward achieving strategic goals or objectives. These measures can and will be improved upon in the ensuing years. DOT's performance data illustrate to senior decision makers what things are going well, and where the areas of improvement lie; where strategies need re-examination, or where different levels of resources need to be applied; and to guide overall resource allocations during the annual budget process. Program evaluations are utilized to confirm the linkage between activities and effects. Additionally, the department will continue to set performance goals sufficiently high so that not every one of them will be attained.

Question. Are there any factors, such as inexperience in making estimates for certain activities or lack of data that might affect the accuracy of resource estimates?

Answer. DOT exerts influence over highly complex human and technological systems, throughout many levels of government and with the private sector. Resource estimates, and performance estimates, will always be subject to some level of uncertainty. But, the Department expects that some uncertainties will be reduced over time as performance, budgeting, management, and financial systems become better integrated.

WAIVERS OF REQUIREMENTS

Question. Are you requesting any waivers of non-statutory administrative requirements?

Answer. DOT has a waiver policy/process in place that allows DOT employees to request waivers to existing, internal administrative procedures that officials within the Department have the authority to waive. The DOT Waiver Policy was developed in 1998 in response to the President's Executive Memorandum of 4/21/98, "Streamlining the Granting of Waivers". All employee waivers that have been requested are listed on the DOT Waiver Website (waiver.dot.gov) by Operating Administration (OA) and each OA has a point of contact for waivers. The Department now has 74 waivers posted, 56 of those are from the USCG. Examples of some of the waivers posted include: eliminating or reducing paperwork for payroll/personnel functions; changes in delegated approval levels for organizational changes; modifications to requirements regarding USCG uniforms; and modifications to procurement requirements.

Question. Specifically, are you requesting any relaxation of transfer or reprogramming controls in return for specific accountability commitments?

Answer. No. We have no such plans at this time.

DOT STRATEGIC PLANNING

Question. Based on your fiscal year 1999 performance plan, do you see any need for any substantive revisions in your strategic plan issued on September 30, 1997?

Answer. As provided by the Government Performance and Results Act, DOT is in the midst of updating the department's strategic plan referred to in the question. A new Strategic Plan will be published later this year.

FUTURE PERFORMANCE REPORTING

Question. The Department is to be commended for the concise and efficient performance report and performance plan. The document is quite useful and the presentation is clear and well organized. In future publications of the Performance Report and Performance Plan, please provide the immediate three year prior goal targets and actual results as well as the current fiscal year target and the prospective target for the next fiscal year. Please provide for the record, the 1997, 1998, and 1999 goals and actual results as well as the target for the current fiscal year and the prospective target for fiscal year 2001 in a table that simply lists the strategic goal, the individual (sub-goals) under that strategic goal (performance progress reports) and the requested information by year.

Answer. As data on actual results are obtained, the department will publish these in annual performance reports. In the meantime, please refer to the following table, which is extracted from the DOT fiscal year 1999 Performance Report and fiscal year 2001 Performance Plan. Note that there were no specific GPRA goals in 1997 and 1998. [Attachment II]

Attachment II

SAFETY	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**1999** GOAL	**2000** Goal	2001 **GOAL**
Fatalities/100 million VMT	1.7	1.7	1.7	1.7	1.6	1.6	1.5	1.6	1.5	1.5
Injured persons/100 million VMT	137	139	143	141	133	122	119	127	116	113
% highway fatalities alcohol-related	43.5	40.7	41.2	40.9	38.6	38	38	36	35	34
% front occupants using seat belt	66	67	68	68	69	70	67	80	85	86
Number of fatalities involving large trucks	4,856	5,144	4,918	5,142	5,398	5,374	5,203	X	4,934	4,830
Number of injured persons involving large trucks (in thousands)	133	133	117	130	133	127	127	X	125	122
U. S. commercial fatal aviation accidents/ 100,000 flight hours	.033	.044	.031	.037	.055	.006	.040	.034	.033	.031
Number of fatal general aviation accidents	417	430	436	389	371	383	354	X	379	379
Runway incursions	186	200	240	274	318	325	322	270	248	241
Operational errors/100,000 activities	0.51	0.54	0.52	0.51	0.48	0.55	0.57	0.49	.486	.5
Deviations/100,000 activities	0.11	0.11	0.10	0.10	0.12	0.18	0.18	0.09	.097	X
Recreational boating fatalities	*848*	831	888	770	857	864	773	763	763	749
% mariners rescued that are reported in life-threatening danger	92	96	94	93	93	94	95	93	93	X
% property reported in imminent danger saved	74	85	92	89	68	81	80	X	80	X
% all mariners in imminent danger who are rescued	79	90	85	84	84	84	88	X	X	85
Number of high-risk passenger vessel casualties per 1,000 vessels	44	50	50	57	54	55	39	X	53	52
Fatalities/100,000 workers aboard commercial vessels	59	31	37	38	39	35	28	34	X	X

Train accidents/million train-miles	4.25	3.82	3.67	3.64	3.54	3.77	3.79	3.44	3.38	3.29
Rail-related fatalities/ million train-miles	2.08	1.87	1.71	1.55	1.57	1.48	1.30	1.57	1.30	1.23
Grade crossing accidents divided by the product of million train-miles and trillion VMT	3.47	3.22	2.87	2.57	2.27	1.98	2.00	2.19	1.57	1.39
Rail-related trespasser fatalities divided by product of MTM and billion U.S. population	3.30	3.10	2.80	2.64	2.94	2.80	2.46	2.58	X	X
Transit fatalities/100 million PMT	.610	.670	.567	.523	.545	.565	.531	.507	.502	.497
Transit injured persons/100 million PMT	129	135	133	127	118	119	112	123	121.9	120.7
Natural gas transmission pipeline failures	5,378	4,933	4,767	4,964	4,871	4,160	3,754	4,528	4,451	4,375
Failures of hazardous liquid pipelines	230	244	188	195	175	154	159	171	X	X
Pipeline incidents caused by outside force damage	168	158	146	150	129	162	117	137	X	X
Serious hazardous material incidents in transportation	358	427	408	466	422	432	341	430	411	401

X= No Goal

MOBILITY	1993	1994	1995	1996	1997	1998	1999	1999 GOAL	2000 GOAL	2001 GOAL
Percent miles of NHS roads meeting pavement performance standards	88.7	89.6	90.1	90.4	91.7	91.8	N/A	91.5	91.8	91.9
Percent of deficient NHS bridges	26.7	25.7	25.7	25.8	23.4	23.2	22.7	22.8	22.5	22.3
Hours of delay per 1,000 VMT on Fed-aid Highways	N/A	N/A	N/A	8.2	8.2	8.1	N/A	8.1	8.0	7.9
Percent increase in level of ITS integration in 6 metro areas above 1997 baseline	N/A	N/A	N/A	N/A	N/A	N/A	37	20	X	X
Number of metro areas where integrated ITS infrastructure is deployed	N/A	N/A	N/A	N/A	36	N/A	48	X	51	56
Percent of runways in good or fair condition	93	N/A	N/A	93	95	95.1	95	93	93	93
System capacity attributable to airport infrastructure at the 50 busiest airports	N/A	N/A	N/A	N/A	N/A	N/A	N/A	X	X	X
Volume and equipment related delays per 100,000 flight activities	47.10	36.97	33.83	36.64	38.28	32.55	30.37	30.70	X	X
Aviation delays per 100,000 activities	194.6	174.6	155.8	183.3	160.1	190.8	220	X	171	171
Total published Global Positioning System (GPS) airport approaches	N/A	0	44	352	937	937	1984	1953	2453	X
Number of runways that are accessible in low visibility conditions	N/A	N/A	N/A	N/A	1044	1083	1,084	X	X	1,191
Percent subsidized communities with at least 2 round trips/day, 6 days/week (12 round trips/week)	N/A	N/A	N/A	N/A	N/A	100	100	100	100	100
Percent subsidized communities with at least 3 round trips/day, 6 days/week (18 round trips/week)	N/A	N/A	N/A	N/A	N/A	75	75	75	75	75
Percent total operating days marine aids to navigation are available for use on U.S. waters	N/A	99.3	99.2	98.3	98.8	98.9	98.4	99.7	X	X
Total number of navigational accidents – maritime collisions,	961	1159	1236	1396	1243	1274	1377	X	1224	1199

allisions, and groundings										
Percent of ports reporting landside impediments to the flow of commerce	N/A	N/A	N/A	N/A	N/A	41	40	40	39	37
Percent ports reporting land-and waterside impediments to the flow of commerce	N/A	N/A	N/A	N/A	N/A	N/A	N/A	X	X	TBD
Percent of days in shipping season that locks are available	96	94	96	99	97	98	99	99	99	99
Amtrak trip time between NY and Boston (in hours)	4.75	4.75	4.75	4.75	4.75	4.75	4.75	3	X	X
Percent Amtrak trains arriving on time	72	72	76	71	74	79	79	87	X	X
Percent Amtrak customer satisfaction	N/A	N/A	81	82	84	84	82	87	X	X
Number of intercity and commuter trains scheduled along the most congested segments of the Wash/Boston Corridor	318	325	332	332	332	332	332	X	X	X
Intercity ridership (millions of passengers)	22.1	21.2	20.7	19.7	20.2	21.1	21.5	X	23.7	25.3
Revenue vehicle hours of service (rail and non-rail, in millions)	175	180	183	184	187	197	203	195	X	X
Passenger-miles traveled (in billions) by transit	36.22	37.88	37.97	38.98	40.18	41.60	43.10	X	40.56	43.97
Average condition of motor bus fleet on scale of 1 (poor) to 5 (excellent)	2.96	2.96	2.95	3.02	3.09	3.11	3.10	X	3.15	3.20
Average condition of rail vehicle fleet on scale of 1 (poor) to 5 (excellent)	3.21	3.17	3.15	3.13	3.09	3.08	3.14	X	3.19	3.24
Percent of key rail stations ADA compliant	N/A	13	19	19	26	29	49	37	47	58
Percent bus fleet ADA compliant	50	55	60	63	68	72	77	73	80	83

N/A= Not Available
X= No Goal

ECONOMIC GROWTH	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**1999 GOAL**	**2000 GOAL**	**2001 GOAL**
Miles of Appalachian Development Highway System completed	2106	2142	2177	2204	2259	2290	2409	2327	2373	2483

Percent of aircraft able to fly off ATC-preferred routes	N/A	N/A	N/A	75	75	76	77	80	80	80
Passengers (millions) in international markets with open aviation agreements	N/A	32.7	35.5	38.9	40.9	43.0	48.6	43.4	44.7	51.6
Days critical waterways are closed due to ice	N/A	N/A	N/A	7	0	0	0	2	2-8	2-8
Gross tonnage (in thousands) of commercial vessels under construction in U.S. shipyards	N/A	N/A	N/A	N/A	570	407	532	510	520	530
Number of employment sites that are made accessible by Job Access and Reverse Commute transportation services	N/A	N/A	N/A	N/A	N/A	N/A	1692	X	4050	8050
Number of students graduating with transportation-related advanced degrees from universities receiving DOT funding	N/A	N/A	N/A	N/A	N/A	1167	N/A	X	1046	1203
Students (in thousands) reached through Garrett A. Morgan Technology and Transportation Futures Program	N/A	N/A	N/A	N/A	71	1,031	1,502	650	3,000	5,000
Percent share of DOT direct contracts awarded to small disadvantaged business	16.6	22.7	23.4	19.7	19.6	17.0	18.3	X	14.5	14.5
Percent share of DOT direct contracts awarded to women-owned businesses	3.00	2.23	3.85	2.41	4.00	3.70	4.20	5.00	5.00	5.00

N/A= Not Available

X= No Goal

NATURAL ENVIRONMENT	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**1999 GOAL**	**2000** *GOAL*	**2001 GOAL**
Tons (in millions) of mobile source emissions from on-road motor vehicles	74.4	76.6	67.9	66.8	65.1	63.7	N/A	64.9	63.5	62.2
Metric tons (in millions) of carbon equivalent emissions from transport	424.8	441.5	451.6	467.7	469.9	481.2	N/A	X	X	#

sources										
Transportation-related petroleum consumption (in quadrillion BTUs) per trillion dollars of Real Gross Domestic Product (GDP)	3.47	3.45	3.44	3.43	3.36	3.22	N/A	X	3.13	3.09
Acres of wetlands replaced for every acre affected by Federal-aid Highway projects	N/A	N/A	N/A	2.3	2.6	2.2	2.3	1.5	1.5	1.5
Percent urban population living within ¼ mile of a transit stop with service of 15 minutes or less	N/A	N/A	N/A	11.22	11.56	11.21	11.24	11.56	11.68	11.78
Number of people (in thousands) in U.S. exposed to significant aircraft noise levels	2,100	N/A	1,700	1,450	N/A	1,100	680	680	600	600
Gallons of oil spilled per MGS, by maritime sources	5.33	6.05	6.49	7.18	1.47	2.63	2.38	5.04	4.83	4.62
Percent change in number of species that are designated as overfished	N/A	N/A	N/A	N/A	N/A	N/A	N/A	X	-8%	1%
Compliance rate with Federal fisheries regulations	N/A	N/A	N/A	N/A	N/A	N/A	98	95	X	X
Tons of hazardous liquid materials spilled per pipeline million TMS	.0146	.0233	.0132	.0232	.0257	.0118	.0223	.0171	.0161	.0151
Gallons of hazardous liquid materials spilled (non-pipeline) per serious transportation incident	2743	1608	2107	3365	1852	2221	2237	2046	X	X
Percent DOT facilities categorized as No Further Remedial Action Planned under Superfund Amendments and Reauthorization Act	44	59	67	75	74	78	90	80	82	91
Environmental justice cases that remain unresolved over one year	N/A	N/A	2	6	5	13	13	12	10	4

N/A= Not Available
X= No Goal
# = Set after Senate ratifies Kyoto protocol

NATIONAL SECURITY	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**1999 GOAL**	**2000** *GOAL*	**2001** *GOAL*
Detection rate for explosives and weapons that may be brought aboard aircraft	#	#	#	#	#	#	#	#	#	#
Of those who need to act, percent that receive threat information within 24 hours	N/A	N/A	N/A	N/A	N/A	N/A	41.5	X	90	90

Ship capacity (in twenty-foot equivalent units, or TEUs) available to meet DOD need	N/A	N/A	N/A	N/A	124,152	161,258	162,151	165,000	165,000	165,000
Ship capacity (in million square feet) available to meet DOD's requirements for intermodal sealift capacity	N/A	N/A	N/A	N/A	12.3	14.2	14.3	14.5	15.0	X
Percent of total mariners available to crew	N/A	N/A	N/A	N/A	N/A	N/A	123	100	100	100
Percent DOD-designated primary or alternate ports available when requested by DOD	N/A	N/A	74	62	60	93	93	90	90	93
Percent RRF no-notice activations that meet assigned readiness	100	95	100	100	94	100	100	100	100	100
Percent of days that RRF ships are mission capable while under DOD control	N/A	98.8	99.5	99.9	95.2	98.8	98.4	99	99	99
Readiness rating for all high endurance cutters, patrol boats, and port security units	N/A	N/A	N/A	N/A	57	N/A	53	72	X	X
Percent days that the designated number of critical defense assets maintain a Combat Readiness rating of 2 or better	N/A	N/A	N/A	N/A	N/A	N/A	4	X	100	100
Percent seizure rate of cocaine shipped through transit zone	6	5	6	5	16	10	12	12.2	13	15
Percent success rate for undocumented migrants attempting to enter U.S. over maritime routes	N/A	N/A	25	8	6	9	13.3	13	13	13

N/A= Not Available
X= No Goal
#= Sensitive

ATLANTA OLYMPICS FUNDING

Question. Please provide a comprehensive breakout of all federal transportation funding provided to support the 1996 Atlanta Summer Olympics. Please indicate from which agency and account the funds were appropriated and in which legislation the funding was provided; describe the use of each line item appropriation; and characterize the eligible uses of the funds provided.

Answer. The information is included in the table below.

Federal Transportation Funding in Support of the 1996 Atlanta Summer Olympics

	Annual Appropriations $(000)			
	Provided Solely or Principally Because of Olympics		Other Funds Supporting the Olympics	
Agency/ Account / Project	FY 1995	FY 1996	FY 1995	FY 1996
Federal Highway Administration				
Federal-aid Highways				
Advanced Traffic Mgt. Syst.	43,431	14,645		
Kiosks	4,000			
Traveler Showcase	14,000			
Driver Advisor System	7,240			
Signing & Lighting	1,237	1,392		
Pedestrian & Bicycle Paths	15,780	1,196		
Express Lane Projects			42,000	
I-85 Glarescreen			1,653	
Other (e.g., welcome ctrs)			22,480	198
Total, FHWA	85,688	17,233	66,133	198
Federal Transit Administration				
Account(s)?				
Op. Assist. to MARTA for Bus Service	15,000			
Planning Grant for Paralympics	1,000			
MARTA Car Overhaul Prog.			27,500	
Grants to MARTA: 118 CNG Buses			23,500	
ITS system			2,000	
Trav. Center			1,500	
Total, FTA	16,000	0	54,500	0

Agency/ Account / Project	Annual Appropriations $(000) Provided Solely or Principally Because of Olympics FY 1995	FY 1996	Other Funds Supporting the Olympics FY 1995	FY 1996
Federal Aviation Administration				
Operations				
5 Portable Towers		1,181		
Aviation Safety Inspectors		62		
Security		526		
Facilities & Equipment				
Temporary Control Towers & Automation Enhancements	141	350		
Total, FAA	141	2,119	0	0
US Coast Guard				
Operating Expenses				
Sailing Event (traffic control/ ops.)	490	2,200	0	0
Research & Special Programs Admin.				
Research & Special Programs				
Hazmat Incident Response Prog.	24	14	0	0
Total, Department of Transportation	102,343	21,566	120,633	198

QUESTIONS SUBMITTED TO THE FEDERAL AVIATION ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

TOWER AND CENTER OPERATIONS

Question. Please provide a table outlining total operations handled by towers and en route center controllers over the past ten years. Please also include the numbers of controllers in each category with the operations numbers.

Answer. The following table provides the information requested.

TOTAL OPERATIONS BY TOWERS AND CENTERS

Fiscal year	Centers		Towers		
	Aircraft handled	Block update (BU) staffing	Airport operations	Instrument operations	BU staffing
1990	37,464,206	6,680	63,668,880	46,866,201	7,965
1991	36,137,766	6,912	61,485,577	45,042,293	8,064
1992	36,474,871	6,945	61,471,727	45,643,834	8,202
1993	37,419,173	6,775	60,108,153	45,699,597	8,195

TOTAL OPERATIONS BY TOWERS AND CENTERS—Continued

Fiscal year	Centers		Towers		
	Aircraft handled	Block update (BU) staffing	Airport operations	Instrument operations	BU staffing
1994	38,839,795	6,632	60,298,149	46,733,058	8,321
1995	40,149,335	6,452	57,973,853	47,048,407	8,162
1996	40,419,365	6,331	54,409,886	46,628,546	8,029
1997	41,375,392	6,425	53,256,154	48,128,137	8,163
1998	43,196,004	6,639	52,987,600	49,272,910	8,327
1999	44,654,427	6,607	55,068,646	51,110,257	8,295

WENDELL H. FORD AVIATION INVESTMENT AND REFORM ACT FOR THE 21ST CENTURY

Question. Given the FAA reauthorization legislation the President just signed, please provide a revised budget request for FAA operations constrained to the overall Budget Authority (BA) and Outlay constraints of the President's overall BA and Outlays levels for the FAA in the aggregate. To the extent that additional funds are desired by the administration for FAA operations above the levels permitted by the President's budget request (BA and Outlays) less the FAA reauthorization bill's protected accounts, please reflect offsets from other Transportation accounts. Failure to provide such a revised budget request in the immediate aftermath of the President's endorsement of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (FAIR–21) approach will constitute a tacit approval of making up any resource shortfall with corresponding reductions in the FAA operations appropriation.

Answer. The levels of funding provided in FAIR–21 are authorization levels. Since no direct spending is provided in FAIR–21, actual budgetary resources, including obligation limitations, are provided by annual appropriations acts. FAIR–21 did not amend the Congressional Budget Act, nor did it create new discretionary spending categories such as were created in the Transportation Efficiency Act for the 21st Century (TEA–21). In addition, the "protected accounts" referred to in the question are changes made in both House and Senate floor procedures for action on future Transportation and Related Agencies Appropriation Bills. These procedures only apply to the standing rules of House and Senate and do not impact the levels requested by the President for the FAA, nor do they influence whether or not the President would sign or veto an appropriations bill. Due to the reasons stated above, there is no plan to amend the President's fiscal year 2001 budget request for the FAA.

AIR TRANSPORTATION OVERSIGHT SYSTEM

Question. Last June the General Accounting Office (GAO) issued a report on FAA's new safety inspection program called the Air Transportation Oversight System (ATOS). While GAO supported ATOS in principle it found several problems with the way it was being implemented. These included lack of adequate advance training and guidance for inspectors, lack of sufficient travel funds, and the incompatibility of the ATOS database with the tracking system FAA has spent nearly $100 million developing over the past several years. As a result, GAO recommended that ATOS not be extended to other airlines until these problems are remedied. What progress has FAA made in addressing these problems, and what are your plans for further expanding ATOS to cover more airlines?

Answer. The lack of adequate advance training and guidance for inspectors has been addressed. The ATOS Certificate Management Office (CMO) has developed and delivered several three-day ATOS standardization seminars designed for principal inspectors and data evaluation program managers. These seminars have been lauded by participants for their content and ability to convey the intent of ATOS and the processes the Agency uses to inspect air carriers. In addition, the ATOS CMO developed a one-day seminar for the other 500 ATOS certificate management team members. As for enhanced guidance, in December 1999, the ATOS CMO published guidance for developing comprehensive surveillance plans, for planning, conducting, and reporting both safety attribute inspections and element performance inspections, for ensuring data quality, and for surveillance reporting. All of this

guidance is available on the ATOS Web site. This new guidance greatly enhances the understanding of ATOS implementation.

The Flight Standards ATOS CMO has been working to secure additional funding. The budget plans through fiscal year 2002 have identified appropriate levels of funding to accommodate ATOS travel requirements.

All of the issues will be addressed before the Flight Standards Service extends ATOS to other airlines. The ATOS CMO has addressed many of the problems incurred in the Phase 1 version of ATOS and an effort is underway to complete the development of all eight modules of the ATOS model. As a result of these efforts, and dependant upon the ATOS funding situation, the tentative plan for ATOS expansion is slated for fiscal year 2003.

Question. In particular, how have you addressed the database incompatibility problem, and how will you ensure that such lack of internal coordination will not occur again?

Answer. There is an effort currently underway to link the ATOS data with the Safety Performance Analysis System and to accommodate an ATOS data query capability. This effort is slated for completion in June 2000. In addition, the ATOS CMO is establishing processes to ensure it is coordinated on and therefore cognizant of all automation issues related to ATOS.

CONTRACT TOWERS

Question. We worked last year to fashion a very good Department of Transportation (DOT) bill and the President signed it. Now, we understand DOT may propose to cut off funding for nearly half the contract towers across the country in a couple of months. The contract tower program is very important from an aviation safety perspective and it is providing significant ATC cost savings. In fact, audits by the DOT Inspector General validate the important benefits of the program and suggest that it might make sense to expand it. I am baffled DOT is even considering a funding reduction and want you to explain why DOT may propose action that could adversely affect aviation safety and will penalize a program that is solidly justified from a benefit/cost standpoint.

Answer. Withdrawing Federal funding from contract towers without commercial services was one of many options being considered in response to the agency's budgetary shortfalls. This option is no longer under consideration.

Question. Please provide the number of operations handled at contract towers by year over the past ten years. In addition, please provide the number of controllers at contract towers by year over the same period.

Answer. The approximate number of operations handled at contract towers, by year, over the past ten years are listed below.

Fiscal year	Operations	Federal contract tower (FCT) staffing [1]
1990 [2]	1,187,023	.....
1991	1,560,433	.....
1992	1,666,935	.....
1993	1,648,008	.....
1994	1,884,369	195
1995	4,446,574	456
1996	7,499,099	664
1997	10,413,335	837
1998	12,270,742	838
1999	13,0737,42	864

[1] Staffing numbers for contract towers were not formally kept prior to 1994, when the program was nationalized.

[2] Database information is available beginning with January 1990. Therefore, fiscal year 1990 only is for January through September 1990.

OVERFLIGHT FEE COLLECTIONS

Question. How much is anticipated for collection in overflight user fees in fiscal year 2000 and in fiscal year 2001?

Answer. The fiscal year 2001 President's budget assumes collections of $5.1 million in fiscal year 2000 and $22.1 million in fiscal year 2001.

FUNDING FOR DEVELOPMENT OF GLOBAL POSITIONING SYSTEM (GPS) APPROACHES

Question. Please provide the breakout of FAA operations funding associated with development of GPS approaches?

Answer. FAA Operations funding for development of GPS approaches is $6,044,000. The breakout follows:

11xx	PC&B/Overtime/Flight Time	$3,311,394
12xx	PC&B/PCS/Flight Time	693,991
21xx	Travel/PCS	28,700
22xx	PCS	4,500
25xx	Contract Service/Flight Time	1,720,425
26xx	Supplies/Flight time	284,990
Total		6,044,000

AIRPORT SECURITY COSTS

Question. Please provide a breakout of airport security and related costs included in the FAA Operations, Facilities and Equipment (F&E), and Airport Improvement Program (AIP) requests.

Answer. The breakout of airport security and related costs in fiscal year 2001 for FAA Operations, F&E, and AIP appropriations are as follows:

Operations	$144,328,000
F&E:	
Activity 5	2,500,000
Explosives Detection Technology	97,500,000
Facility Security Risk Management	19,339,000
Aviation Safety Analysis System	2,109,000
F&E Total	121,448,000
AIP: Grants in Aid to Airports	16,000,000

FULL-TIME EMPLOYMENT

Question. Please breakout the reimbursements/allocations of full-time permanent employment for the three years listed on page 9 of the justification by office.

Answer. The information is listed below.

Appropriation	Fiscal year		
	1999 actual employment	2000 estimate employment	2001 estimate employment
Operations:			
Air Traffic Services:			
Air Traffic	24,087	23,795	23,795
NAS Logistics [1]	1,070	1,060	466
Systems Maintenance	9,259	9,142	9,344
ARS	166	182	182
Flight Inspection [1]	610	610	392
Subtotal, Air Traffic Services	35,192	34,789	34,179
Aviation Regulation & Certification:			
Flight Standards	4,605	4,557	4,597
Aircraft Certification	1,009	1,024	1,048
Accident Investigation	28	30	30
Rulemaking	25	26	26
Planning, Direction & Evaluation	34	35	35
Aviation Medicine	280	294	294

Appropriation	Fiscal year		
	1999 actual employment	2000 estimate employment	2001 estimate employment
Subtotal, AVR	5,981	5,966	6,030
Civil Aviation Security	1,136	1,155	1,221
Research & Acquisitions	573	581	551
Airports	477		
Commercial Space Transportation	31	34	69
Administration	1,289		
Financial Services		128	
Human Resources		161	
Region & Center Operations		994	
Staff Offices	547	562	1,989
Subtotal, Operations	45,226	44,370	44,039
Facilities & Equipment	2,699	2,762	2,804
Research, Engr. & Devel	361	411	411
Grants-in-Aids for Airports		485	503
Aviation Insurance	3	3	3
Total, Direct	48,289	48,031	47,760
Total, Reimbursable [1]	363	513	1,345
Total, FAA	48,652	48,544	49,105

[1] Employment Levels for NAS Logistics and Flight inspection decrease in fiscal year 2001, and Reimbursable levels increase, due to the proposal to transfer aircraft. Maintenance and Logistics Center operations into the Franchise Fund.

AVIATION RULEMAKING ADVISORY COMMITTEE

Question. FAA has had a history of being slow in issuing rules to safeguard aviation safety. Examples include the updating of rules governing aviation repair station, and the use of flight data recorder information. In 1991, the Aviation Rulemaking Advisory Committee (ARAC) was founded to move rules through the rulemaking process more quickly. Has ARAC met this goal? Are any steps to better achieve the stated goal being considered?

Answer. The ARAC was chartered to provide advice and recommendations to the FAA's rulemaking activity with respect to aviation related issues. Because ARAC provides advice and recommendation based on consensus from the aviation industry the process of rulemaking, in some instances, is expedited. The incorporation of the ARAC's recommendations into proposed rulemaking often results in fewer comments being received during the notice of proposed rulemaking (NPRM) comment period. For example the training and qualifications issues group of the ARAC forwarded to the FAA a recommendation regarding certification requirements for aircraft dispatchers. The FAA accepted the recommendations and subsequently published an NPRM incorporating ARAC's recommendation. As a result, the NPRM received only four comments in support of the NPRM thereby expediting the rulemaking process because the FAA did not have to expend resources addressing the comments and possibly change the proposed rule based on the comments.

However, the activities of ARAC do not circumvent the normal coordination process or public rulemaking procedures. In the development of an ARAC recommendation or the development of a proposed rule by the FAA, a considerable amount of resources are expended in order to ensure that issues are thoroughly analyzed and consensus is reached. The ARAC has found that attempts to reach consensus in certain areas can be time-consuming, given the diverse interests of the public. In fact, some ARAC working groups have been deliberating for several years. In those kinds of instances, the FAA has allowed the ARAC to forward recommendations without draft rulemaking documents. In addition, the FAA has adopted the policy of chartering some ARAC tasks to state specifically that consensus recommendations need not include draft rulemaking documents. Instead, the ARAC may request a consensus technical report.

The FAA continues to streamline the rulemaking process and has gained efficiencies, however, staffing remains an issue. The FAA plans to issue approximately 50 priority rulemaking projects, 250 exemptions, and process 30 petitions for rulemaking requests this year. The Agency's five-year plan contains over 250 rulemaking projects that are critical to enhancing aviation safety.

COST FREE FACILITIES

Question. The FAA has recently reversed its decades-old practice of paying below-market rates for FAA facilities located on airport property, opting to force airport sponsors to furnish space to the Agency without cost. What consideration has the Agency given to the effect this change will have on the financial situation at airports—particularly smaller airports—that have grown to rely on this rental revenue over the past several decades?

Answer. There will be no change for many airports since these airports did not charge rent to FAA for cost-free facilities. Other airports will need to address the revenue change and for the most part, the loss of revenue for individual airports is in the thousands of dollars, while the impact to the FAA could be much more significant. In addition, it is important to note that the cost-free provisions are based in statute. The FAA's actions are intended to fairly, equitably, and consistently apply these statutory requirements.

Section 47107(a)(12) of title 49, United States Code, states "the airport owner or operator will provide, without charge to Government, property interests of the sponsor in land or water areas or buildings that the Secretary decides are desirable for, and that will be used for, constructing at Government expense, facilities for carrying out activities related to air traffic control or navigation." This requirement has been in statutes beginning with the Federal Airport Act of 1946 and included in each similar legislation including the Airport and Airway Development Act of 1970 and the Airport and Airway Improvement Act of 1982.

Up until the early 1980's the FAA received such facilities on a cost-free basis except in those instances in which the airport constructed a facility on our behalf. Since the statute provides that the construction of the facility must be at Government expense, the FAA entered into leases to reimburse airports for the capital costs for the construction. Since the early 1980's, however, the statutory provision has not been applied consistently, but the FAA has continued to receive facilities rent free at many airports.

In addressing this inconsistency in the application of the requirement, the FAA recognized that many airports would not be able to absorb the loss of revenue readily. FAA took care to minimize the immediate financial effect on airports in a manner consistent with our responsibilities as a steward of Federal taxpayer dollars. First, FAA will be applying its rights to rent-free space only at the expiration of existing leases involving the payment of rent for property interests that would qualify for rent-free treatment. Since the FAA and the airport negotiated these leases in good faith, the FAA will take no action to terminate these leases before their expiration. Second, even for airports with leases expiring, the FAA delayed implementation of the enforcement of the statutory requirements until the beginning of fiscal year 2001, to provide airports with adequate time to deal with the reduction in their cash flow. Thus, for airports with leases that expired in fiscal year 1999, FAA personnel are authorized to negotiate one-year extensions, with rental payments as a transitional measure, directed to achieving full compliance with statutory requirements.

Finally, the statutory provision does not give the FAA an unlimited right to occupy airport property without compensation. The airport is entitled to compensation for utilities and janitorial services provided to the FAA. The FAA may also enter into a lease agreement with the airport sponsor under which the sponsor performs alterations of space and reimbursed by the FAA. The provision only applies to air traffic, weather-reporting and air navigation facilities. Other FAA operations would pay rent.

Question. If airports are unable to absorb these costs, they will be forced to pass them on to other airport users because AIP grant assurance require airports (Airport Advisory Number 24) to have a fee and rental structure that make the airport as self-sustaining as possible. Has the FAA studied the impact of this change on other airport users?

Answer. The requirement for the provision of cost-free land and building space is based on statute. Section 47107(a)(12) of title 49, United States Code, states "the airport owner or operator will provide, without charge to Government, property interests of the sponsor in land or water areas or buildings that the Secretary decides are desirable for, and that will be used for, constructing at Government expense,

facilities for carrying out activities related to air traffic control or navigation." The self-sustaining provision is contained in the same statute.

For many airports, there will be no change, as these airports did not charge rent to FAA for cost-free facilities. Other airports will need to address the revenue change. However, it should be noted that since the assurances have been inconsistently applied, many of these airports have received Federal funds over the past 10–20 years. Also for the most part, the loss of revenue for individual airports is in the thousands of dollars, while the impact to the FAA's budget could be much more significant.

Question. If this change is adopted, won't the FAA face the perverse incentive to locate the facilities appropriately located off airport property—such as Terminal Radar Approach Control (TRACONS)—on airport property to save money at the expense of airports? Has the FAA studied the effect this would have on airport traffic, airport master development plans, and airport operations?

Answer. The statutory provisions in Section 47107(a)(12) of title 49, United States Code, cover essentially two areas: cost-free land or cost-free space in existing buildings. Generally, the FAA has not sought space in airport buildings—either on a free or reimbursable basis, but only cost-free land. Airports normally provide cost-free land for FAA to construct its facilities. Since there has been no change in the FAA's access to cost-free land, there would be no additional incentive to locate facilities on the airport that could be located off airport.

There should be no effect on airport traffic, airport master development plans and airport operations. If FAA needs to locate some facilities on the airport, it will be due to operational necessity and not to save money. Many facilities such as airport towers, landing aids, and weather sensors must be located on airport property.

UNIVERSAL ACCESS SYSTEM

Question. Section 102(b) of the FAA Reauthorization Bill authorized $8 million for the voluntary purchase and installation of Universal Access Systems (UAS). The legislative history directs the FAA to work with organizations representing airports and airline pilots to rapidly deploy the continuously—updated data needed on approved flight crew members that will allow universal access systems to properly operate. It also directs the Agency to partner with industry to develop the universal data and standards needed to make such security systems quickly available, and utilize digital networks that are designed for airport sponsors and therefore maximize the incentives to deploy universal security systems on a voluntary basis. Does FAA have an official position on the direction suggested on this issue in the FAA Reauthorization legislation?

Answer. The FAA is encouraging voluntary participation in a UAS through cooperative agreements between airports and air carriers. Using funds previously appropriated, FAA tasked the joint government-industry UAS working group of the Aviation Security Advisory Committee (ASAC) to develop the standards and protocols for a UAS. A test program using an airline central database and two participating airports was successful. The UAS working group went on to complete an implementation plan and a few airports have linked to the central database. However, opposition to wide implementation of UAS was expressed in the working group. The ASAC subsequently voted to retire the working group at its meeting on May 13, 1999. FAA remains willing to assist airport operators that may request AIP funds for the installation of UAS.

TRAINING

Question. What cuts have been made in the training activity at the FAA Academy in Oklahoma City? What cuts have been made in other FAA training programs? Please provide a table with the anticipated 2000 budget request training levels for all FAA training activities and the resulting training level in that fiscal year, as well as the anticipated fiscal year 2001 budget request for training levels for all FAA training activities.

Answer. Some FAA training activities, including air traffic training at the Academy, have been cut this year due to the budget shortfalls the Agency is facing. The only major cut that has been imposed at the Academy is in the Air Traffic training program. Additional training funds for the Air Traffic program at the Academy is included in the supplemental funding requested by the President. The fiscal year 2000 current estimate for training reflects the appropriation below the request level. Absent the $77 million supplemental request, training is expected to be about $4 million less than the request level. The following table displays the amounts assumed in fiscal year 2000 request, current fiscal year 2000 estimate, and amounts in the 2001 President's budget.

FEDERAL AVIATION ADMINISTRATION OPERATIONS APPROPRIATION TRAINING COSTS

LOB	Total training program		
	Fiscal year 2000 request	Current fiscal year 2000 estimate [1]	Fiscal year 2001 estimate
Air Traffic Services:			
Air Traffic	$41,638,000	$38,952,000	$48,500,000
NAS Logistics	296,842	506,074	516,196
Systems Maintenance	43,990,998	38,700,000	53,831,000
Flight Inspection	3,400,000	3,941,423	4,000,544
ARS	.....	70,755	85,728
Total, ATS	89,325,840	82,170,252	106,933,468
Aviation Regulation & Certification:			
Flight standards	44,492,000	44,492,000	56,709,000
Certification	6,200,000	6,200,000	7,496,000
Accident Investigation	574,000	837,000	872,000
Rulemaking	80,000	80,000	100,000
PD&E	76,000	65,000	65,000
Medical	240,000	291,000	296,000
Total, AVR	51,662,000	51,965,000	65,538,000
Civil Aviation Security	4,200,000	3,878,700	4,968,700
Research and Acquisitions	1,711,070	1,406,000	1,427,090
Airports	892,000	.....	.....
Commercial Space Transportation	21,000	25,100	37,300
Region/Center Operations	.....	2,069,448	2,100,490
Human Resource Management	11,000,000	12,470,000	13,700,000
Financial Services	.....	136,000	950,000
Staff Offices:			
AOA	.....	8,000	10,000
ACR	.....	22,760	25,036
APA	.....	15,000	15,000
AGI	.....	.....	.....
API	.....	41,500	61,000
AGC	6,000	500	500
ASY	.....	9,000	15,000
AIO	.....	502,500	509,535
Subtotal	6,000	599,260	636,071
Total, Operations	158,817,910	154,719,760	196,291,119

[1] Excludes Administration's $77 million supplement request.

CONTRACT TOWERS

Question. Last year, before the House Appropriations Subcommittee, Administrator Garvey and Acting Administrator Belger testified that the fiscal year 2000 budget request envisioned $20 million in savings. Has the FAA achieved those $20 million in savings as outlined in the House testimony last year? The FAA also noted that the contract tower program avoids some "$30 million a year in costs that we would otherwise incur if we were operating those facilities." What is the status of the report to the Committee relating to the contact tower program that the FAA has been delinquent on for so long. Please indicate which offices that need to sign off on that report have failed to clear the report.

Answer. Providing air traffic control service at low activity towers via contract support has generated savings of approximately $250,000 per tower or $30 million per year. The fiscal year 2000 and the fiscal year 2001 budgets utilize these savings

to meet increased air traffic staffing requirements in other areas. The report to the Committee is in internal coordination.

COST SAVINGS

Question. Last year, the FAA Administrator testified in the same hearing, "I think it is absolutely critical and important (to contain costs). We are putting every measure that we can in place to contain costs—we always have to be looking at ways to keep those costs down. As Ken Mead and others have said, it is particularly challenging when you have a budget that is made up primarily of personnel costs. We have to recognize that as we look at some of the efficiencies. I put a lot of hope on the kind of efficiencies we have talked about in our contract negotiations and our agreed-upon contract with National Air Traffic Controller Association (NATCA). Asking people to take on more responsibilities as well as some of the other efficiencies that we have talked about are very important." To date, the subcommittee is unaware of any significant cost savings that have emerged at the FAA due to increased efficiencies. Please provide a list and quantify them for the Subcommittee. In addition, the Subcommittee views the cost control measures that the FAA has taken to be on the order of one time annual savings—cutting training, travel, slowing hiring or replacement personnel. What savings has the FAA instituted that have significant efficiencies in the out years? Please provide a list and quantify the out years savings.

Answer. During fiscal year 2000, the FAA has taken several actions to operate within the reduced funding levels provided for the Operations appropriation. First, a hiring freeze has been imposed, which the Agency estimates will result in staffing levels about 800 below the fiscal year 1999 levels and over 2,300 below the levels estimated in the fiscal year 2000 President's budget. There are some delays in hiring taking place, particularly in Airway Facilities and Aviation Regulation and Certification, but the savings associated with the delays, which are one-time, are over and above the savings mentioned above.

In addition to the staffing reductions, the agency has made reductions to travel, contracts, supplies, and equipment. None of these reductions should be considered one-time. There are no funds included in the fiscal year 2001 budget to restore these reductions so they will carry-over into future years just as cuts in prior years have. The reductions will be offset by whatever programmatic increases are approved through the appropriation process, but the programmatic increases included in the budget are not restorations, they are expansions of current initiatives or new requirements.

As mentioned in the question, most of the Operations appropriation goes toward payroll costs. These costs represent about 75 percent of total Operations costs. As a result, staffing represents the major component of any effort to reduce costs. The Agency has significantly reduced staffing since fiscal year 1992. The Agency has also reduced our non-payroll costs since fiscal year 1992 after accounting for inflation and added costs for such things as contract weather, contract towers, contract maintenance, charting, and the Canine program.

SAVINGS IN THE OPERATIONS APPROPRIATION

[In thousands of dollars]

Item	Amount saved in fiscal year 2000 (from 99 levels)	Out year savings/year (from 92 levels)
Staffing Reductions (includes Contract Tower and Flight Service Stations)	145,497	434,336
Travel and Transportation Reductions	5,600	52,100
Rents, Communications, and Utilities	.....	43,773
Supplies	3,600	19,700
Contracts	3,300	[1] 55,500
Equipment	26,600	33,800
Total	184,597	639,209

[1] Represents savings after adjusting contractual cost for the new requirements/initiatives that the Agency must now pay for.

ONBOARD STAFFING

Question. Please provide a listing by line of business and by major organization within each line of business, comparing the current onboard staffing levels to those shown in the fiscal year 1999 column, the fiscal year 2000 column, and the fiscal year 2001 of the President's budget.

Answer. The listing is provided below.

Appropriation	Feb. 2000 onboard employment	Fiscal year 1999 actual employment	Fiscal year 2000 col. of fiscal year 2001 Pres. budget	Fiscal year 2001 col. of fiscal year 2001 Pres. budget
Operations:				
Air Traffic Services:				
Air Traffic	23,888	24,087	23,795	23,795
NAS Logistics [1]	1,034	1,070	1,060	466
Systems Maintenance	9,100	9,259	9,142	9,344
ARS	166	166	182	182
Flight Inspection [1]	590	610	610	392
Subtotal, Air Traffic Services	34,778	35,192	34,789	34,179
Aviation Regulation & Certification:				
Flight Standards	4,483	4,605	4,557	4,597
Aircraft Certification	974	1,009	1,024	1,048
Planning, Direction & Evaluation	86	87	91	91
Aviation Medicine	276	280	294	294
Subtotal, AVR	5,819	5,981	5,966	6,030
Civil Aviation Security	1,124	1,136	1,155	1,221
Research & Acquisitions	524	573	581	551
Airports	463	477	.....	.....
Commercial Space Transportation	32	31	34	69
Administration	.....	1,289	.....	.....
Region & Center Operations	977	.....	994	.....
Human Resource Management	155	.....	161	.....
Financial Services	124	.....	128	.....
Staff Offices:				
Office of the Administrator	49	52	57	57
Civil Rights	16	16	16	37
Government and Industry Affairs	9	10	11	11
Public Affairs	29	33	33	33
Policy, Planning, and Int'l Av	129	136	137	137
Chief Counsel	266	265	273	282
System Safety	35	35	35	35
Human Resources	.....	.....	.....	161
Financial Services	.....	.....	.....	167
Region & Center Operations	.....	.....	.....	994
Chief Information Officer	45	.....	.....	75
Subtotal, Staff Offices	578	547	562	1,989
Total, Operations	44,574	45,226	44,370	44,039

[1] Fiscal year 2001 staffing for NAS Logistics and Flight Inspection are reduced due to the proposal to include aircraft maintenance and Logistics Center operations in the Franchise Fund.

END-OF-YEAR STAFFING LEVELS

Question. Please provide a listing by line of business and by major organization within each line of business, comparing the current planned end of year fiscal year

2000 staffing levels to those shown in the fiscal year 2000 column of the President's budget request, compared to the fiscal year 1999 actual levels.

Answer. This listing is provided below.

Appropriation	Fiscal year 1999 actual employment	Current plan for fiscal year 2000	Fiscal year 2000 col. of fiscal year 2001 Pres. budget
Operations:			
Air Traffic Services:			
Air Traffic	24,087	23,795	23,795
NAS Logistics	1,070	1,060	1,060
Systems Maintenance	9,259	9,142	9,142
ARS	166	182	182
Flight Inspection	610	610	610
Subtotal, Air Traffic Services	35,192	34,789	34,789
Aviation Regulation & Certification:			
Flight Standards	4,605	4,557	4,557
Aircraft Certification	1,009	1,024	1,024
Planning, Direction & Evaluation	87	91	91
Aviation Medicine	280	294	294
Subtotal, AVR	5,981	5,966	5,966
Civil Aviation Security	1,136	1,155	1,155
Research & Acquisitions	573	581	581
Airports	477	.....	.....
Commercial Space Transportation	31	34	34
Administration [1]	1,289	.....	.....
Region & Center Operations [1]	.....	994	994
Human Resource Management [1]	.....	161	161
Financial Services [1]	.....	128	128
Staff Offices:			
Office of the Administrator	52	57	57
Civil Rights	16	16	16
Government and Industry Affairs	10	11	11
Public Affairs	33	33	33
Policy, Planning, and Int'l Av	136	137	137
Chief Counsel	265	273	273
System Safety	35	35	35
Subtotal, Staff Offices	547	562	562
Total, Operations	45,226	44,370	44,370

[1] Administration ceased to exist after fiscal year 1999. For fiscal year 2000, the DOT appropriations bill made region center operations, human resources, and financial services separate line items.

GSA RENT

Question. How much is included in your fiscal year 2001 request for GSA rent, broken out by line of business?

Answer. The amount of GSA rent identified for fiscal year 2001 is $91,798,018. Listed below is the breakout by line of business and staff office.

Lines of Business and Staff Offices	*Distribution of GSA Rent Cost*
AGC	$3,179,871
API	1,621,721
AGI	149,387
APA	369,179
ACR	723,373

Lines of Business and Staff Offices	*Distribution of GSA Rent Cost*
AHR	4,677,464
ABA	4,266,202
ASY	442,459
AIO	451,177
ARC	3,312,151
ATS	36,621,036
ARA	9,392,393
AVR	16,587,477
ARP	4,110,170
ACS	5,591,176
AST	302,780
Total	91,798,018

TRAVEL COSTS

Question. Please provide any update of the tables on travel costs that started on page 454 through 457 of last year's House hearing record.

Answer. The tables on travel costs follow:

TRAVEL AND TRANSPORTATION OF PERSONS AND THINGS OPERATIONS APPROPRIATION

[In thousands of dollars]

	Fiscal year—		
	1999 actual	2000 estimate	2001 estimate
Training travel	32,754	26,702	34,838
Job performance travel	49,101	58,625	68,337
Other travel	8,436	8,137	7,940
Transportation of things	20,658	22,026	19,959
Total	110,949	115,490	131,074

TRAVEL AND TRANSPORTATION EXPENDITURES OPERATIONS APPROPRIATION

Object Class Codes		Fiscal year	
		1998	1999
2100	Continental US Travel—Site Visit	$31,604,494	$28,015,124
2101	Continental US Travel—Information Meeting	6,218,827	4,722,841
2102	Continental US Travel—Speech or Presentation	361,092	257,965
2103	Continental US Travel—Conference Attendance	1,475,824	1,116,888
2104	Continental US Travel—Relocation of Employees	435,830	331,550
2105	Continental US Travel—to Seek Residence Quarters	361,374	259,988
2106	Nonforeign US Travel—To Seek Residence Quarters	26,934	2,527
2107	Continental US Travel—Special Mission Travel	177,013	181,127
2108	Continental US Travel—Emergency Travel	(232,851)	(164,796)
2109	Continental US Travel—Other Travel	11,720,581	8,838,463
2110	Overseas Travel—Site Visit	7,097,638	7,262,226
2111	Overseas Travel—Information Meeting	779,749	578,631
2112	Overseas Travel—Speech or Presentation	86,698	52,100
2113	Overseas Travel—Conference Attendance	49,519	34,249
2114	Overseas Travel—Relocation (PCS)	49,323	47,779
2116	Overseas Travel—Entitlement	246,761	199,092
2117	Overseas Travel—Special Mission	33	.....
2118	Overseas Travel—Emergency	9,045	3,509
2119	Overseas Travel—Other	447,401	416,771
211A	Continental US Travel—Expenses for Interviews	14,783	10,881

TRAVEL AND TRANSPORTATION EXPENDITURES OPERATIONS APPROPRIATION—Continued

Object Class Codes		Fiscal year 1998	Fiscal year 1999
211B	Continental US Travel—Relocation Of New Appointees and Student Trainees	292	
211D	80 percent Optional Reduced Rate (TDY)		5,260
2130	Training Travel—Non-Gov Long-Term (LT) College	1,817	74,513
2131	Training Travel—Non-Gov LT Private	3,155	30,110
2132	Training Travel—Non-Gov Short-Term (ST) College	129,578	147,945
2133	Training Travel—Non-Gov ST Private	6,974,792	4,908,785
2134	Training Travel—Gov LT—Internal	77,243	90,461
2135	Training Travel—Gov LT—Interagency	1,757	38,383
2136	Training Travel—Gov ST—Internal	25,308,090	27,106,832
2137	Training Travel—Gov ST—Interagency	501,570	356,971
2170	Lease of Aircraft	59,901	13,684
2171	Rental of Motor Vehicles, Government	4,504,145	4,776,549
2172	Rental of Motor Vehicles, Commercial	540,241	567,160
2180	OH Dist—Travel	279	
2197	Lost Discounts—Travel		43
2199	Late Payment Interest Penalty—Travel	10,072	6,772
2200	OH Dist—Transp		8,203
2201	Mail & Messenger Services—Freight	461,205	398,184
2202	Mail & Messenger Services—Freight WCF	209	466
2204	Rental—Trucks & Other Equipment	9,687,347	12,813,510
2210	Transp. of ADP Equipment	7,372	11,505
2211	Transp. of Government Property	3,738,877	4,093,326
2212	Transp. of Government Exhibits	25,615	367
2221	Transp. of Household Goods For Employees	4,403,033	3,080,113
2222	Transp. of Privately-Owned Vehicles	88,536	184,408
2223	Transp. of Things—Other	85,351	63,020
2297	Lost Discounts—Transp.	117	242
2299	Late Payment Interest Penalty—Transp	338	5,092
	Travel and Transportation Total	117,541,000	110,948,819

Question. Also provide a listing of the use of the FAA G–IV aircraft, the cost of the operation of the aircraft by trip, and the overhead costs attributed to that aircraft for hangering and maintenance as well as the marginal maintenance and staffing costs directly attributable to that aircraft.

Answer. Below are the overhead costs attributed to the aircraft in fiscal year 1999.

Hangering	$280,404
Maintenance	714,649
Marginal Maintenance	376,282
Direct Staffing	336,609
Total	1,707,944

FAA'S USAGE OF G–IV AIRCRAFT BY TRIP

Date	Agency	Passenger	Flight hours	Rate	Total
Transportation Flights:					
10/08/98	DOC	Cabinet Member	2.7	2,658	7,176.60
12/01/98	FAA	Security (hazmat)	7.3	2,658	19,403.40
12/02/98	FAA	Security (hazmat)	6.4	2,658	17,011.20
12/03/98	FAA	Security (hazmat)	6.5	2,658	17,277.00
12/04/98	FAA	Security (hazmat)	4.0	2,658	10,632.00

FAA'S USAGE OF G–IV AIRCRAFT BY TRIP—Continued

Date	Agency	Passenger	Flight hours	Rate	Total
12/15/98	FAA	Security (hazmat)	6.9	2,658	18,340.20
12/16/98	FAA	Security (hazmat)	6.0	2,658	15,948.00
12/17/98	FAA	Security (hazmat)	6.0	2,658	15,948.00
12/21/98	FAA	Security (hazmat)	8.6	2,658	22,858.80
04/22/99	FAA	Security (hazmat)	5.4	2,658	14,353.20
04/26/99	FAA	Tech Center	2.7	2,658	7,176.60
05/28/99	DOT	Cabinet Member	12.2	2,658	32,427.60
05/30/99	DOT	Cabinet Member	13.2	2,658	35,085.60
06/02/99	NTSB	Board Member	4.2	2,658	11,163.60
06/03/99	DOT	Cabinet Member	8.6	2,658	22,858.80
06/04/99	DOT	Cabinet Member	4.2	2,658	11,163.60
06/11/99	NTSB	Board Member	9.5	2,658	25,251.00
06/15/99	FAA	Security (hazmat)	5.6	2,658	14,884.80
06/16/99	FAA	Security (hazmat)	4.2	2,658	11,163.60
07/10/99	FAA	Staff	2.4	2,658	6,379.20
07/14/99	NTSB	Board Member	5.0	2,658	13,290.00
07/15/99	NTSB	Board Member	4.6	2,658	12,226.80
07/29/99	FAA	Stars Program	2.1	2,658	5,581.80
07/30/99	FAA	Airshow support	3.9	2,658	10,366.20
07/31/99	FAA	Airshow support	3.7	2,658	9,834.60
08/01/99	FAA	Airshow support	3.4	2,658	9,037.20
08/17/99	FAA	Tech Center	5.0	2,658	13,290.00
08/20/99	FAA	Tech Center	4.8	2,658	12,758.40
09/02/99	FAA	Administrator	4.0	2,658	10,632.00
Total			163.1		433,519.80
Reimbursable Flights:					
10/05/1998	FEI	Fed Students	2.7	2,658	7,176.60
10/19/1998	NASA	Dep. Administrator	3.9	2,000	7,800.00
10/20/1998	NASA	Congressional Staffers	3.9	2,000	7,800.00
10/22/1998	NASA	Dep. Administrator	3.9	2,000	7,800.00
10/22/1998	NASA	Staff	3.2	2,000	6,400.00
10/23/1998	NASA	Staff	2.8	2,000	5,600.00
10/29/1998	NASA	Dep. Administrator	4.6	2,000	9,200.00
11/07/1998	NASA	Staff	3.8	2,000	7,600.00
11/09/1998	NASA	Dep. Administrator	3.3	2,000	6,600.00
11/10/1998	NASA	Dep. Administrator	2.0	2,000	4,000.00
11/24/1998	DOE	cabinet	4.0	2,658	10,632.00
12/07/1998	NASA	Staff	3.5	2,000	7,000.00
12/08/1998	NASA	Staff	2.4	2,000	4,800.00
12/10/1998	NASA	Congressional Staffers	3.9	2,000	7,800.00
02/28/1999	DOJ	cabinet	7.3	2,658	19,403.40
03/03/1999	DOJ	cabinet	4.6	2,658	12,226.80
03/04/1999	DOJ	cabinet	6.5	2,658	17,277.00
03/13/1999	Office VP	VP wife	9.8	2,658	26,048.40
03/15/1999	Office VP	VP wife	1.2	2,658	3,189.60
03/17/1999	Office VP	VP wife	1.0	2,658	2,658.00
03/21/1999	Office VP	VP wife	11.8	2,658	31,364.40
03/25/1999	Office VP	VP wife	4.9	2,658	13,024.20
03/27/1999	Office VP	VP wife	3.3	2,658	8,771.40
05/03/1999	NASA	Congressional Staffers	5.7	2,000	11,400.00
05/04/1999	NASA	Staff	2.0	2,000	4,000.00
05/04/1999	FEMA	Congressional	5.4	2,658	14,353.20
05/06/1999	NASA	Staff	2.0	2,000	4,000.00
05/13/1999	NASA	Staff	6.3	2,000	12,600.00

FAA'S USAGE OF G–IV AIRCRAFT BY TRIP—Continued

Date	Agency	Passenger	Flight hours	Rate	Total
05/19/1999	NASA	Staff	2.1	2,000	4,200.00
05/21/1999	NASA	Staff	2.1	2,000	4,200.00
06/17/1999	FEMA	Director	5.0	2,658	13,290.00
06/18/1999	FEMA	Director	2.5	2,658	6,645.00
06/24/1999	NASA	Administrator	1.5	2,000	3,000.00
06/25/1999	NASA	Administrator	1.6	2,000	3,200.00
07/07/1999	NTSB	Board Member	2.0	2,658	5,316.00
07/19/1999	NASA	Administrator	1.8	2,000	3,600.00
07/20/1999	NASA	Congressional Staffers	1.7	2,000	3,400.00
07/21/1999	NASA	Administrator	1.7	2,000	3,400.00
07/22/1999	NASA	Administrator	1.9	2,000	3,800.00
08/03/1999	USMS	Prisoners	9.6	2,658	25,516.80
08/04/1999	USMS	Prisoners	6.9	2,658	18,340.20
08/05/1999	USMS	Prisoners	7.8	2,658	20,732.40
08/11/1999	DOJ	Staff	1.6	2,658	4,252.80
08/12/1999	St Lawrence Seaway	Congressional Staffers	2.7	2,658	7,176.60
08/13/1999	NASA	Staff	3.4	2,000	6,800.00
09/13/1999	FEMA	Director	4.1	2,658	10,897.80
09/21/1999	FEMA	Director	2.3	2,658	6,113.40
Total			182.0		434,406.00
Training:					
04/19/1999	FAA	NONE	5.3	2,658	14,087.40
04/20/1999	FAA	NONE	5.9	2,658	15,682.20
06/01/1999	FAA	NONE	5.9	2,658	15,682.20
08/30/1999	FAA	NONE	3.3	2,658	8,771.40
08/31/1999	FAA	NONE	5.1	2,658	13,555.80
Total			25.5		67,779.00
Pilot Currency, Proficiency, and Testing:					
10/05/1998	FAA	NONE	2.5	2,658	6,645.00
10/06/1998	FAA	NONE	4.7	2,658	12,492.60
10/06/1998	FAA	NONE	4.6	2,658	12,226.80
10/08/1998	FAA	NONE	3.0	2,658	7,974.00
10/09/1998	FAA	NONE	2.3	2,658	6,113.40
10/14/1998	FAA	NONE	3.9	2,658	10,366.20
10/21/1998	FAA	NONE	3.4	2,658	9,037.20
11/05/1998	FAA	NONE	4.4	2,658	11,695.20
11/12/1998	FAA	NONE	1.3	2,658	3,455.40
11/20/1998	FAA	NONE	4.5	2,658	11,961.00
11/23/1998	FAA	NONE	4.9	2,658	13,024.20
11/25/1998	FAA	NONE	1.9	2,658	5,050.20
11/27/1998	FAA	NONE	3.4	2,658	9,037.20
12/09/1998	FAA	NONE	1.9	2,658	5,050.20
12/21/1998	FAA	NONE	1.2	2,658	3,189.60
12/22/1998	FAA	NONE	3.5	2,658	9,303.00
12/23/1998	FAA	NONE	4.1	2,658	10,897.80
12/29/1998	FAA	NONE	3.5	2,658	9,303.00
12/31/1998	FAA	NONE	3.8	2,658	10,100.40
02/18/1999	FAA	NONE	3.2	2,658	8,505.60
02/19/1999	FAA	NONE	3.9	2,658	10,366.20
02/22/1999	FAA	NONE	4.3	2,658	11,429.40
02/24/1999	FAA	NONE	4.0	2,658	10,632.00

FAA'S USAGE OF G–IV AIRCRAFT BY TRIP—Continued

Date	Agency	Passenger	Flight hours	Rate	Total
02/25/1999	FAA	NONE	2.1	2,658	5,581.80
02/26/1999	FAA	NONE	3.5	2,658	9,303.00
03/05/1999	FAA	NONE	1.3	2,658	3,455.40
03/12/1999	FAA	NONE	3.1	2,658	8,239.80
03/22/1999	FAA	NONE	5.7	2,658	15,150.60
03/30/1999	FAA	NONE	5.3	2,658	14,087.40
04/01/1999	FAA	NONE	4.7	2,658	12,492.60
04/02/1999	FAA	NONE	2.0	2,658	5,316.00
04/21/1999	FAA	NONE	4.7	2,658	12,492.60
04/29/1999	FAA	NONE	4.4	2,658	11,695.20
05/07/1999	FAA	NONE	3.7	2,658	9,834.60
05/11/1999	FAA	NONE	3.7	2,658	9,834.60
05/11/1999	FAA	NONE	1.9	2,658	5,050.20
05/12/1999	FAA	NONE	5.6	2,658	14,884.80
05/18/1999	FAA	NONE	3.0	2,658	7,974.00
05/24/1999	FAA	NONE	3.3	2,658	8,771.40
06/08/1999	FAA	NONE	4.1	2,658	10,897.80
06/10/1999	FAA	NONE	3.5	2,658	9,303.00
06/22/1999	FAA	NONE	4.1	2,658	10,897.80
06/23/1999	FAA	NONE	3.6	2,658	9,568.80
07/07/1999	FAA	NONE	3.6	2,658	9,568.80
07/08/1999	FAA	NONE	5.9	2,658	15,682.20
07/09/1999	FAA	NONE	4.2	2,658	11,163.60
07/10/1999	FAA	NONE	2.9	2,658	7,708.20
07/12/1999	FAA	NONE	5.3	2,658	14,087.40
07/13/1999	FAA	NONE	5.2	2,658	13,821.60
07/16/1999	FAA	NONE	4.9	2,658	13,024.20
07/19/1999	FAA	NONE	1.2	2,658	3,189.60
07/22/1999	FAA	NONE	3.4	2,658	9,037.20
07/23/1999	FAA	NONE	3.6	2,658	9,568.80
08/06/1999	FAA	NONE	5.5	2,658	14,619.00
08/10/1999	FAA	NONE	3.6	2,658	9,568.80
08/13/1999	FAA	NONE	2.3	2,658	6,113.40
08/16/1999	FAA	NONE	4.0	2,658	10,632.00
08/23/1999	FAA	NONE	4.7	2,658	12,492.60
08/24/1999	FAA	NONE	3.3	2,658	8,771.40
08/25/1999	FAA	NONE	4.9	2,658	13,024.20
08/26/1999	FAA	NONE	4.4	2,658	11,695.20
09/01/1999	FAA	NONE	4.1	2,658	10,897.80
09/08/1999	FAA	NONE	4.1	2,658	10,897.80
09/10/1999	FAA	NONE	3.9	2,658	10,366.20
09/14/1999	FAA	NONE	4.2	2,658	11,163.60
09/21/1999	FAA	NONE	2.3	2,658	6,113.40
09/22/1999	FAA	NONE	4.3	2,658	11,429.40
09/23/1999	FAA	NONE	5.0	2,658	13,290.00
10/27/1998	FAA	NONE	3.9	2,658	10,366.20
12/18/1998	FAA	NONE	4.2	2,658	11,163.60
Total			260.4		692,143.20
Aircraft Test and Ferry:					
01/04/1999			2.4	2,658	6,379.20
01/04/1999			0.8	2,658	2,126.40
02/09/1999			1.8	2,658	4,784.40
04/12/1999			1.5	2,658	3,987.00
04/16/1999			1.3	2,658	3,455.40

FAA'S USAGE OF G–IV AIRCRAFT BY TRIP—Continued

Date	Agency	Passenger	Flight hours	Rate	Total
08/18/1999			2.2	2,658	5,847.60
09/24/1999			1.5	2,658	3,987.00
Total			11.5		30,567.00
Grand total			642.5		1,658,415

TRANSIT SUBSIDY BENEFIT PROGRAM

Question. Please provide data on the transit subsidy benefit program consistent with the information provided on page 470 of the fiscal year 2000 House report but also provide for fiscal year 2001 the anticipated cost of the transit benefit for employees making more than $50,000 a year in salary by metropolitan area.

Answer. The tables follow.

ESTIMATED COSTS FOR FAA PARTICIPATION IN THE TRANSIT BENEFIT PROGRAM—FISCAL YEARS 1995–2000

Fiscal year	Headquarters	Regions	Admin. Ex.[1]	Total
1995	$1,141,454	$137,046	$51,964	$1,330,464
1996	1,210,360	225,408	59,506	1,495,274
1997	1,313,022	274,406	94,181	1,681,609
1998	1,486,887	309,165	83,804	1,879,856
1999	1,529,804	320,095	102,460	1,952,359
2000	1,513,358	458,669	112,603	2,084,630

[1] The Admin. Ex. (administrative expense) is for headquarters only.

Note.—The 2000 data are projections. The headquarters and regions costs are based primarily on actual data for the period (October through February).

Current Number of Enrollees in FAA's Transit Benefit Program by Metropolitian Area [1]

Washington	1,919
Chicago	98
Kansas City	42
Los Angeles	32
Denver	12
Atlanta	17
Ketchikan, AK	22
New York	73
San Francisco	1
Honolulu	1
Seattle	139
Salt Lake City	25
Boston	39
Miami	9
Total	2,429

[1] Based on data for January and February

Note.—The anticipated fiscal year 2001 cost of transit benefits provided to employees in the Washington, DC metro area who make more than $50,000 in annual salary will be approximately $890,604. This estimate was determined by researching the Washington, DC, FAA Headquarters transit benefit program database. This database provides a copy of each person's application for these benefits. There are approximately 1,919 FAA transit benefit applicants in the Washington, DC area. After reviewing 46 percent of all the applications, it was determined that 59.5 percent of FAA employees who use this program are GS–12 or above.

OTHER SERVICES—OPERATIONS

Question. Please provide a breakdown of your fiscal year 2001 "other services" request, similar in format to last year's House report on page 480–481.

Answer. The table follows.

OTHER SERVICES—OPERATIONS APPROPRIATION

[In thousands of dollars]

	Fiscal year		
	1999 actual	2000 estimate	2001 estimate
A–76 contractual services	66	94	134
AAC—engineering design and support	.....	.....	.....
Accident prevention program	.....	.....	.....
Aeronautical charting services [1]	34,412	33,178	36,226
Aircraft airworthiness composite and major repairs	.....	.....	.....
Aircraft/simulator rental [2]	5,605	5,270	9,070
Audio visual services	21	23	24
Automated flight inspection system (AFIS)	.....	.....	.....
Automation support contract	14,300	16,611	20,537
Aviation safety analysis system (ASAS)	.....	.....	.....
Center weather services—FAA/NOAA	7,265	7,800	8,200
Challenge 2000	4,541	4,749	6,866
Contract maintenance [3]	81,157	48,393	136,430
Contract physicians	215	215	215
Contractual data processing service [4]	25,570	26,046	44,217
Contractual studies	6,676	7,195	13,168
Contractual time-sharing teleprocessing services	1,523	2,586	2,631
Contractual training services [5]	19,621	19,310	26,050
Effective secretarial services (ESS)	33	.....	.....
Employee assistance program services	1,485	1,600	1,600
Employee involvement program services	.....	.....	.....
Federal law enforcement training	.....	.....	.....
Flight/nonflight training [2]	23,267	21,723	33,850
Flight standards district office data entry support Contract	692	100	100
Flight training	2,530	2,767	2,657
General working agreement at Transportation Systems Center	20,138	17,611	19,678
Information Security [6]	2,442	4,885	27,450
Janitorial and guard services	26,052	30,443	30,755
Contract for personal services for clerical functions	4,564	4,164	4,174
Leased telecommunications [3]	27,522	30,129	38,300
Maintenance of host computer	28,000	26,000	26,000
Maintenance of integrated communication switching system	.....	.....	.....
Master labor contract Tokyo	.....	.....	.....
Medical clinic service for ARTCC's	140	140	140
Medical examinations	26	26	27
Handbooks	629	655	705
NAS supply support [3]	39,863	41,607	49,732
Not otherwise classified [7]	101,238	100,588	94,676
Office of automation technology & services (OATS)	10,950	546	600
OMEGA	.....	.....	.....
On-the-job training for flight inspection and procedures	.....	.....	.....
Operation of contract ATC towers [8]	45,386	56,400	55,300
Overhaul of aircraft engines	3,196	2,058	7,305
Physical examinations	1,682	1,888	1,893
Project SAFE—Technical training module development	.....	.....	.....
Random drug testing	2,593	2,720	2,850
AAD–60 support (aircraft) (HANGAR 6)	.....	.....	.....
Regional support (aircraft)	.....	.....	.....

OTHER SERVICES—OPERATIONS APPROPRIATION—Continued

[In thousands of dollars]

	Fiscal year		
	1999 actual	2000 estimate	2001 estimate
Regulatory analysis	744	424	688
Repair and maintenance of ADP equipment	4,711	3,709	3,831
Repair/maintenance administrative, operating, working, and test equipment	6,400	6,989	7,055
Repair, maintenance and inspection of equipment and buildings [9]	20,588	17,506	35,894
Security investigations	1,069	1,132	1,524
Society of automotive engineers	.....	.....	.....
Storage of household effects	1,259	1,204	1,509
Substance abuse program	200	200	70
Supervisory identification & development program services	.....	.....	.....
Technical Center:			
Sector operations support contract	.....	.....	.....
Other engineering support	.....	.....	.....
Traffic management system/Enhanced traffic management system [10]	3,219	3,380	13,023
USAF training of K–9 teams	8,329	7,690	8,690
Vulnerability Assessments [11]	200	223	1,700
Weather observation services	38,635	41,120	27,022
Transportation Administrative Services Center (TASC)	28,600	24,163	24,959
Y2K Contracts	2,252	.....	.....
Total, Other Services	659,607	625,260	827,525

[1] Aeronautical charting services increase for fiscal year 2001, as requested in the budget submission, is for maintenance of digital aeronautical radar maps, and NASR Maintenance support.

[2] Aircraft/simulator rental and Flight/nonflight training increases from fiscal year 2000 to fiscal year 2001 are due to AVR's technical training required increases include in the budget request.

[3] Contract maintenance, Leased Telecommunications and NAS Supply Support increases from fiscal year 2000 to fiscal year 2001 are due to operationally required increases included in the budget request to fund new NAS systems coming on line.

[4] Contractual data processing service increase for fiscal year 2001, as requested in the budget submission, is for fielding a new electronic mail system to replace the agency's obsolete lotus cc:mail system and to implement a secure and standardized E-mail System.

[5] Contract training services increase reflects the air traffic budget request to expand computer based instructions and on-the-job-training.

[6] Information Security increase for fiscal year 2001, as requested in the budget submission, is to support the establishment and operation of a FAA information security program.

[7] This line item includes miscellaneous items not identified by a descriptive object class code.

[8] Operation of contract air traffic control towers decrease from fiscal year 2000 to fiscal year 2001 is due to the FAA's discontinuance of the non-beneficial contract towers program as reflected in the Budget request.

[9] Repair, maintenance and inspection of equipment and buildings increase from fiscal year 2000 to fiscal year 2001 is required for maintenance of unstaffed facilities and infrastructure sustainment, as requested in the budget submission.

[10] Traffic management system/Enhanced traffic management systems increase funds the operation and maintenance of the Airspace Redesign and Analysis Laboratory, as requested in the budget.

[11] Vulnerability assessments increase reflects a continuance of the need for conducting vulnerability assessments and development action plans into 2001 as shown in the budget request.

SPECIAL PAYS

Question. Please provide a description of FAA special pays, a breakdown, and line of business delineation for each of fiscal years 1999 through 2001, similar in format to that shown on pages 483–486 of last year's House hearing record.

Answer. Under FAA personnel reform, FAA has implemented changes to the premium pay rules to prohibit payment of Sunday pay and night differential unless employees actually work the time for which the premium pay is paid. The new agreement with the NATCA has changed a number of pay provisions. For controllers and field supervisors and managers in terminals and centers, the 5 percent operational differential provision of the Air Traffic Revitalization Act has been eliminated, and replaced with a corresponding increase in base pay of 4.1 percent. A Controller-in-Charge (CIC) payment has been established, which pays a premium of 10 percent of base pay for time in which controllers are assigned CIC duties. Other special pay categories include:

Overtime pay (up to 150 percent) paid for time worked in excess of eight hours in one day, 40 hours in a week, or 80 hours in a pay period. Overtime rates vary depending on position and coverage under the Fair Labor Standards Act. This is mandatory under FAA policy adopted from 5 United States Code 5542 unless employees receive compensatory time in lieu of overtime.

Sunday pay (25 percent) paid for hours worked on Sunday. This is mandatory under FAA policy adopted from 5 United States Code 5546.

Holiday pay (100 percent) paid for up to eight hours of work on a federal holiday. This is mandatory under FAA policy adopted from 5 United States Code 5546.

Night Differential (10 percent) paid for hours of work between 6 p.m. and 6 a.m. This is mandatory under FAA policy adopted from 5 United States Code 5545.

Hazardous pay (up to 25 percent) paid for all hours in a shift during which the work involves exposure to hazards, physical hardships, or working conditions of an unusual nature. Premium pay rate varies depending on the types of hazard, hardship, or working condition under a schedule issued by the Office of Personnel Management. This is mandatory under FAA policy adopted from 5 United States Code 5545.

Standby pay (up to 25 percent) paid as a percentage of an employee's basic rate of pay to employees whose positions require them to remain at their duty station in a standby status. This is discretionary under FAA policy adopted from 5 United States Code 5545 in lieu of overtime pay for standby time.

Operational responsibility differential (5 percent) paid for all hours in a pay status to flight service specialists and airway facilities technicians involved in direct operation of the air traffic system, to flight test pilots, and to certain Academy instructors.

Currency differential (1.6 percent) paid for all hours in a pay status for non-operational controllers who maintain currency in controlling traffic.

Missed meal break premium (50 percent of pay for one-half hour) paid to controllers required to work during the fourth to sixth hour of their shift without an uninterrupted 30 minute meal break.

Interim Incentive Pay Program: quarterly payments of 10 percent of an employee's basic rate of pay, paid to employees who are assigned to a facility and position covered by the Interim Incentive Pay program. Payments are intended to address chronic recruitment and retention problems at a small number of critical facilities, and will end at the time a new compensation system for covered employees is implemented. These payments are discretionary under authority granted by Public Law 104–50.

A chart follows, which shows total FAA special pay for fiscal year 1999 and estimated special pay for fiscal year 2000 and fiscal year 2001.

FEDERAL AVIATION ADMINISTRATION OPERATIONS APPROPRIATION SPECIAL PAY

[In thousands of dollars]

	Fiscal year		
	1999	2000	2001
Operational Resp. Differential Pay	44,893	29,607	31,094
Premium Pay-Loss of Meal	447	468	486
Operational Currency Pay	418	438	454
Training in Excess of 40 Hours	443	464	481
Premium Pay-OJT	2,098	2,199	2,280
Pay Demonstration	97	.....	.....
Interim Incentive/Controller Incentive Pay	20,876	47,991	35,986
Overtime Pay	45,455	53,472	62,096
Holiday Pay	52,194	52,519	55,261
Sunday Differential	45,004	43,456	45,912
Night Differential	39,555	38,117	40,207
Hazardous Duty Pay	219	205	210
Post Differential	222	222	253
Fixed Premium Compensation	1,285	1,282	1,318
Physicians Comp. Allowance	617	622	625
Cash Awards	5,277	3,826	4,263
Controller-in-Charge	5,912	6,385	7,025

FEDERAL AVIATION ADMINISTRATION OPERATIONS APPROPRIATION SPECIAL PAY—Continued

[In thousands of dollars]

	Fiscal year		
	1999	2000	2001
Total Special Pay	265,010	281,272	287,949

Note.—Interim incentive/controller incentive pay for fiscal year 2000 includes approximately $14 million in retroactive controller incentive pay for fiscal year 1999 for both controllers and facility managers/staff. Interim Incentive pay is still received by select Air Traffic, Airway Facilities, and Security staff.

A chart follows which shows individual line of business estimates for special pay contained within their personnel compensation and benefits budget requests.

Federal Aviation Administration Operations Appropriation Estimated Special Pay in FIscal Year 2000 Budget Request (000's)

FY 2001	Air Traffic	Airway Facilities (includes Flight Insp)	AT System Requir.	Regulation & Certification	Security	Research & Acquisitions	Comm. Space Transp	Staff Offices	Total
Operational Resp. Differential Pay	10,174	20,761	0	159	0	0	0	0	**31,094**
Premium Pay-Loss of Meal	486	0	0	0	0	0	0	0	**486**
Operational Currency Pay	449	5	0	0	0	0	0	0	**454**
Premium Pay-OJT	2,280	0	0	0	0	0	0	0	**2,280**
Interim Incentive/Controller Incentive Pay	32,700	3,027	0	0	259	0	0	0	**35,986**
Overtime Pay	42,284	16,686	0	900	1,165	106	4	951	**62,096**
Holiday Pay	48,751	5,940	0	200	93	27	2	248	**55,261**
Sunday Differential	42,203	3,330	0	172	74	8	0	125	**45,912**
Night Differential	35,655	3,978	0	301	91	19	0	164	**40,207**
Hazardous Duty Pay	0	210	0	0	0	0	0	0	**210**
Post Differential	149	37	0	0	37	0	0	29	**253**
Fixed Premium Compensation	0	1,318	0	0	0	0	0	0	**1,318**
Physicians Comp. Allowance	0	0	0	625	0	0	0	0	**625**
Cash Awards	636	541	45	1,325	600	271	25	820	**4,263**
Controller-in-Charge	7,025	0	0	0	0	0	0	0	**7,025**
Total Special Pay	**223,264**	**55,842**	**45**	**3,682**	**2,319**	**431**	**31**	**2,335**	**287,949**

Note: effective in FY 2000, Airports is funded from the AIP obligation limitation.

FULL-TIME EQUIVALENT (FTE) COSTS

Question. Please update the data on agency-wide average FTE costs shown on page 495 of last year's House hearing record by providing data for fiscal years 1997 through 2001.

Answer. For the Operations Appropriation, the costs per FTE for fiscal years 1997 through 2001 are as follows.

Fiscal year	*Amount*
1997 actual	$80,430
1998 actual	83,750
1999 actual	90,410
2000 estimate	99,110
2001 estimate	107,200

Note.—The figures displayed above were calculated excluding Workers' Compensation and permanent change-of-station costs.

EMPLOYEE SEPARATIONS

Question. Please update the table on employee separations, by office, as shown on page 498 of last year's House hearing record, by providing data from fiscal year 1999 and to date in fiscal year 2000.

Answer. The table is shown below.

Activity	9/30/98 EOY	Gains/ (Separations)	9/30/99 EOY	Gains/ (Separations)	2/29/00 Current
Air Traffic Services:					
Controllers	17,756	(117)	17,639	(143)	17,496
Field Maintenance	8,455	(273)	8,182	(238)	7,944
Other	9,500	(129)	9,371	(33)	9,338
Aviation Regulation & Certification	6,181	(200)	5,981	(162)	5,819
Civil Aviation Security	1,160	(24)	1,136	(12)	1,124
Airports	482	(5)	477	(14)	463
Research & Acquisitions	739	(166)	573	(49)	524
Administration	1,353	(64)	1,289	(33)	1,256
Staff Offices	567	(20)	547	31	578
Commercial Space Transportation	29	2	31	1	32
Subtotal	46,222	(996)	45,226	(652)	44,574
Facilities and Equipment	2,161	538	2,699	(29)	2,670
RE&D	592	(231)	361	36	397
Aviation Insurance	3	.....	3	(1)	2
Total FAA Direct	48,978	(689)	48,289	(646)	47,643

Note.—Even though ''Administration'' doesn't exist in fiscal year 2000, the Feb 2000 employment for ABA, AHR, and ARC are being shown under that line for comparison purposes.

OPERATIONS POSITIONS

Question. Please update the table from page 503–507 of last year's House record, showing number of positions assigned to each of your offices and regions, similar in format from years past.

Answer. The table is provided below.

FAA DISTRIBUTION OF FULL TIME EQUIVALENTS (FTE'S) OPERATIONS APPROPRIATION (DIRECT)

Office	Fiscal year		
	1999 estimate	2000 estimate	2001 estimate
Administrator (Including Deputy Admin. & Comm. Ctr.)	56	63	63
Chief Counsel	290	290	295
Assistant Administrator for Civil Rights	14	17	28
Assistant Administrator for Government & Industry Affairs	13	12	12

FAA DISTRIBUTION OF FULL TIME EQUIVALENTS (FTE'S) OPERATIONS APPROPRIATION (DIRECT)—Continued

Office	Fiscal year		
	1999 estimate	2000 estimate	2001 estimate
Assistant Administrator for Public Affairs	33	34	34
Assistant Administrator for System Safety	36	35	35
Assistant Administrator for Policy, Planning, and International Aviation	9	9	9
Office of Aviation Policy & Plans	58	54	54
Office of Environment and Energy	35	33	33
Office of International Aviation	18	18	18
International Area Offices	57	57	57
Assistant Administrator for Commercial Space Transportation	32	34	52
Assistant Administrator for Financial Services/CFO	134	129	148
Assistant Administrator for Human Resource Management	164	160	160
Assistant Administrator for Region/Center Operations	9	9	9
Assistant Administrator For Information Services/CIO	18	56	69
REGIONAL OFFICES:			
New England	1,843	1,804	1,808
Eastern	5,222	5,071	5,101
Southern	7,487	7,312	7,393
Southwest	5,158	5,064	5,096
Great Lakes	6,381	6,298	6,333
Central	2,415	2,365	2,376
Northwest Mountain	4,102	3,956	3,983
Western-Pacific	5,491	5,227	5,263
Alaskan	1,345	1,293	1,297
Mike Monroney Aeronautical Center	1,862	1,879	1,270
International	55	55	55
Assistant Administrator for Airports	15	.....	.....
Office of Airport Planning and Programming	38	.....	.....
Office of Airport Safety and Standards	37	.....	.....
Associate Administration for Civil Aviation Security	53	55	55
Office of Civil Aviation Security Intelligence	38	39	39
Office of Civil Aviation Security Operations	76	76	76
Office of Civil Aviation Security Policy & Planning	48	46	46
Associate Administrator for Regulation and Certification	21	21	21
Aircraft Certification Service	149	154	166
Flight Standards Service	241	235	237
Office of Aviation Medicine	91	93	93
Office of Rulemaking	24	26	26
Office of Accident Investigation	29	30	30
Office of Suspected Unapproved Parts	15	15	15
Associate Administrator for Air Traffic Services	12	12	12
Director of Air Traffic Program	99	112	112
Air Traffic Airspace Management	78	77	80
Air Traffic Operations	.....	148	148
Air Traffic Plans and Performance	219	100	99
Air Traffic Resource Management	77	83	86
Director of Airway Facilities	53	53	53
NAS Transition and Implementation Service	16	17	17
Operational Support Service	15	15	15
Resource Management Service	85	86	86
NAS Operations Service	129	130	141
Spectrum Policy and Management Service	21	22	22
Flight Inspection and Procedures	607	599	398
Office of System Capacity and Requirements	13	12	12
Air Traffic Systems Requirements Service	169	177	182

FAA DISTRIBUTION OF FULL TIME EQUIVALENTS (FTE'S) OPERATIONS APPROPRIATION (DIRECT)—Continued

Office	Fiscal year		
	1999 estimate	2000 estimate	2001 estimate
Associate Administrator for Research & Development	11	11	11
Office Of Business Management	26	27	27
Chief Scientist for Software Engineering	4	.....	.....
Year 2000 Program Office	8	.....	.....
Integrated Program Team for Information Systems	15	13	.....
Integrated Program Team for Information Technology Services	12	12	.....
Integrated Program Team for Information Technology Acquisitions	13	12	.....
Integrated Product Team for Data Integration and Decision Support	2	8	.....
Corporate Information Resource Management	3	.....	.....
Office of Acquisitions	160	171	219
FAA Technical Center	841	849	867
Total	45,899	44,872	44,444

WORKLOAD INDICATORS

Question. Please update the table on pages 527–528 of last year's House hearing record for fiscal years 1997–2001.

Answer. See table below.

Fiscal year	1997	1998	1999	2000	2001
Forecast Made in March 1996:					
Domestic Aviation Fuel Consumption (Billions of Gallons)	14.4	15.0	15.5	16.0	16.5
Revenue Passenger Miles (Billions)	595.7	628.0	655.0	682.9	712.4
General Aviation Hours Flown (Millions)	23.4	23.7	23.9	24.1	24.5
IFR Aircraft Handled (Millions)	42.2	43.4	44.4	45.3	46.3
Total Operations at Airports with FAA and Contract Towers (Millions)	64.5	65.7	66.7	67.6	68.6
Instrument Operations Handled by FAA and Contract Towers (Millions)	49.1	50.2	51.1	52.0	52.8
Forecast Made in March 1997:					
Domestic Aviation Fuel Consumption (Billions of Gallons)	14.2	14.7	15.3	15.9	16.5
Revenue Passenger Miles (Billions) [1]	608.1	637.4	666.4	696.9	729.8
General Aviation Hours Flown (Millions)	25.8	26.3	26.6	26.9	27.2
IFR Aircraft Handled (Millions)	40.9	41.8	42.5	43.5	44.4
Total Operations at Airports with FAA and Contract Towers (Millions)	62.7	63.4	64.1	65.3	66.1
Instrument Operations Handled by FAA and Contract Towers (Millions)	47.4	48.2	48.9	49.9	50.7
Forecast Made in March 1998:					
Domestic Aviation Fuel Consumption (Billions of Gallons)	14.3	14.8	15.1	15.4	16.0
Revenue Passenger Miles (Billions)	607.5	635.3	660.7	688.5	720.3
General Aviation Hours Flown (Millions)	26.5	26.9	27.3	27.8	28.3
IFR Aircraft Handled (Millions)	41.4	42.0	42.6	43.2	44.2
Total Operations at Airports with FAA and Contract Towers (Millions)	63.4	64.2	65.0	65.9	67.0
Instrument Operations Handled by FAA and Contract Towers (Millions)	48.5	49.2	49.8	50.6	51.6
Forecast Made in March 1999:	ACT		ACT [2]		

Fiscal year	1997	1998	1999	2000	2001
Domestic Aviation Fuel Consumption (Billions of Gallons)	14.4	14.7	14.9	15.3	15.7
Revenue Passenger Miles (Billions)	608.0	623.0	647.4	671.5	698.0
General Aviation Hours Flown (Millions)	27.7	28.2	28.7	29.2	29.8
IFR Aircraft Handled (Millions)	41.4	43.2	44.2	45.2	46.2
Total Operations at Airports with FAA and Contract Towers (Millions)	63.7	65.3	66.5	67.7	69.0
Instrument Operations Handled by FAA and Contract Towers (Millions)	48.8	49.9	50.9	51.9	52.9
Forecast Made in March 2000:	ACT	ACT	ACT [2]		
Domestic Aviation Fuel Consumption (Billions of Gallons)	14.4	14.9	15.4	16.1	16.6
Revenue Passenger Miles (Billions)	608.0	623.4	652.1	681.1	709.3
General Aviation Hours Flown (Millions)	27.7	28.1	29.8	30.4	31.1
IFR Aircraft Handled (Millions)	41.4	43.2	44.7	45.7	46.8
Total Operations at Airports with FAA and Contract Towers (Millions)	63.7	65.3	68.2	69.5	70.9
Instrument Operations Handled by FAA and Contract Towers (Millions)	48.8	50.0	51.8	52.9	54.1

[1] U.S. commercial air carriers (domestic and international) and regional/commuters total scheduled passenger traffic.
[2] Preliminary.

LETTER OF INTENT COMMITMENTS

Question. Please provide a table outlining the letter of intent commitments (LOI) made to date by the FAA and the impact for all the relevant fiscal years from fiscal year 1997 through fiscal year 2003.

Answer. The following table depicts total LOI payment schedules by fiscal year, including fiscal year 1997 through fiscal year 2003.

AIP LETTERS OF INTENT—LOI APPROVALS BY YEAR—ALL

Year	Discretionary	Entitlement	Total
1997	$150,560,983	$38,379,384	$188,940,367
1998	127,868,716	43,818,541	171,687,257
1999	113,741,601	48,478,257	162,219,858
2000	156,393,300	49,640,722	206,034,022
2001	140,691,025	47,277,696	187,968,721
2002	138,953,300	44,673,374	183,626,674
2003	102,150,300	40,341,528	142,491,828

WORKLOAD INDICATORS

Question. Please update the workload measures for the tables on pages 527–536 of last year's House hearing record by adding the data or the estimate for the next fiscal year, without deleting the first reporting fiscal year on each individual table.

Answer. The charts follow:

Workload Indicators

Fiscal Year	1997	1998	1999	2000	2001
Forecast Made in March 1996:					
Domestic Aviation Fuel Consumption (Billions of Gallons)	14.4	15.0	15.5	16.0	16.5
Revenue Passenger Miles (Billions)	595.7	628.0	655.0	682.9	712.4
General Aviation Hours Flown (Millions)	23.4	23.7	23.9	24.1	24.5
IFR Aircraft Handled (Millions)	42.2	43.4	44.4	45.3	46.3
Total Operations at Airports with FAA and Contract Towers (Millions)	64.5	65.7	66.7	67.6	68.6
Instrument Operations Handled by FAA and Contract Towers (Millions)	49.1	50.2	51.1	52.0	52.8
Forecast Made in March 1997:					
Domestic Aviation Fuel Consumption (Billions of Gallons)	14.2	14.7	15.3	15.9	16.5
Revenue Passenger Miles (Billions) 1/	608.1	637.4	666.4	696.9	729.8
General Aviation Hours Flown (Millions)	25.8	26.3	26.6	26.9	27.2
IFR Aircraft Handled (Millions)	40.9	41.8	42.5	43.5	44.4
Total Operations at Airports with FAA and Contract Towers (Millions)	62.7	63.4	64.1	65.3	66.1
Instrument Operations Handled by FAA and Contract Towers (Millions)	47.4	48.2	48.9	49.9	50.7
Forecast Made in March 1998:					
Domestic Aviation Fuel Consumption (Billions of Gallons)	14.3	14.8	15.1	15.4	16.0
Revenue Passenger Miles (Billions)	607.5	635.3	660.7	688.5	720.3
General Aviation Hours Flown (Millions)	26.5	26.9	27.3	27.8	28.3
IFR Aircraft Handled (Millions)	41.4	42.0	42.6	43.2	44.2
Total Operations at Airports with FAA and Contract Towers (Millions)	63.4	64.2	65.0	65.9	67.0
Instrument Operations Handled by FAA and Contract Towers (Millions)	48.5	49.2	49.8	50.6	51.6

Forecast Made in March 1999:	ACT	ACT 2/			
Domestic Aviation Fuel Consumption (Billions of Gallons)	14.4	14.7	14.9	15.3	15.7
Revenue Passenger Miles (Billions)	608.0	623.0	647.4	671.5	698.0
General Aviation Hours Flown (Millions)	27.7	28.2	28.7	29.2	29.8
IFR Aircraft Handled (Millions)	41.4	43.2	44.2	45.2	46.2
Total Operations at Airports with FAA and Contract Towers (Millions)	63.7	65.3	66.5	67.7	69.0
Instrument Operations Handled by FAA and Contract Towers (Millions)	48.8	49.9	50.9	51.9	52.9

Forecast Made in March 2000:	ACT	ACT	ACT 2/		
Domestic Aviation Fuel Consumption (Billions of Gallons)	14.4	14.9	15.4	16.1	16.6
Revenue Passenger Miles (Billions)	608.0	623.4	652.1	681.1	709.3
General Aviation Hours Flown (Millions)	27.7	28.1	29.8	30.4	31.1
Fiscal Year	**1997**	**1998**	**1999**	**2000**	**2001**
IFR Aircraft Handled (Millions)	41.4	43.2	44.7	45.7	46.8
Total Operations at Airports with FAA and Contract Towers (Millions)	63.7	65.3	68.2	69.5	70.9
Instrument Operations Handled by FAA and Contract Towers (Millions)	48.8	50.0	51.8	52.9	54.1

1/ U.S. commercial air carriers (domestic and international) and regionals/commuters total scheduled passenger traffic.
2/ Preliminary.

TOTAL COMBINED GENERAL AVIATION INSTRUMENT OPERATIONS AT AIRPORTS WITH FAA AND CONTRACT TRAFFIC CONTROL SERVICE

Year	General Aviation Instrument Operations	Total Operations	General Aviation Instrument Operations as a Percent of Total
1992	18.2	45.8	39.7
1993	17.8	45.9	38.8
1994	18.1	46.9	38.6
1995	18.2	47.4	38.4
1996	18.1	47.2	38.3
1997	19.1	48.8	39.1
1998	19.9	50.0	39.8
1999E	20.9	51.8	40.3
2000 1/	21.3	52.9	40.3
2001 1/	21.7	54.1	40.1

1/ Forecasts

TOTAL COMBINED GENERAL AVIATION INSTRUMENT OPERATIONS
AT AIRPORTS WITH FAA AND CONTRACT TRAFFIC CONTROL SERVICE 2/
(In Thousands)

Year	General Aviation Instrument Operations	Total Operations	General Aviation Instrument Operations as a Percent of Total
1993	17.8	45.9	38.8
1994	18.1	46.9	38.6
1995	18.2	47.4	38.4
1996	18.1	47.2	38.3
1997	19.1	48.8	39.1
1998	19.9	50.0	39.8
1999E	20.9	51.8	40.3
2000 1/	21.3	52.9	40.3
2001 1/	21.7	54.1	40.1

1/ Forecasts

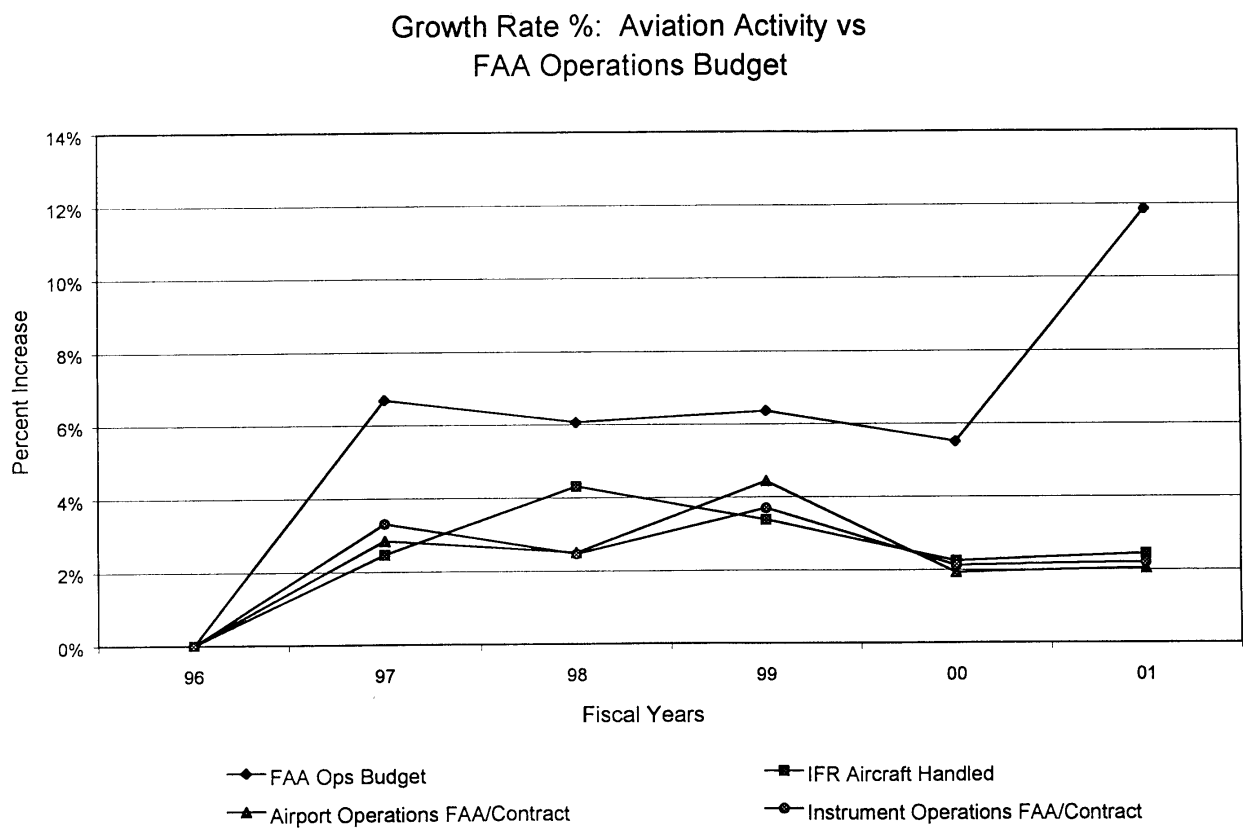
2/ In 1996 the FAA in "FAA Aviation Forecasts Fiscal Years 1996-2007," began reporting air traffic activity for combined FAA and contract towers to make the forecast series consistent with historical data.

WORKLOAD MEASURES AND INDUSTRY TRENDS

DATA FOR LINE GRAPH ON GROWTH IN FAA OPS BUDGET AND AVIATION ACTIVITY

Fiscal year	FAA ops budget	IFR aircraft handled	Airport operations FAA/contract	Instrument operations FAA/contract
1996	4,642,720,000	40,419,300	61,908,900	47,217,200
1997	4,952,912,000	41,411,800	63,666,300	48,778,900
1998	5,252,550,000	43,195,900	65,257,700	49,980,500
1999 [1]	5,586,071,000	44,654,100	68,151,700	51,829,900
2000 (Est)	5,893,390,000	45,653,500	69,462,300	52,928,400
2001 (Est)	6,592,235,000	46,765,500	70,880,900	54,092,500
1996				
1997 (percent)	6.68	2.46	2.84	3.31
1998 (pecent)	6.05	4.31	2.50	2.46
1999 (percent)	6.35	3.38	4.43	3.70
2000 (Est) (percent)	5.50	2.24	1.92	2.12
2001 (Est) (percent)	11.86	2.44	2.04	2.20

[1] Includes supplemental funding of $34.2 million for Y2K-related activities.


Growth Rate %: Aviation Activity vs
FAA Operations Budget
14%
12%
10%
8%
6%
4%
2%
0%
Percent Increase
96
97
98
99
00
01
Fiscal Years
FAA Ops Budget
IFR Aircraft Handled
Airport Operations FAA/Contract
Instrument Operations FAA/Contract

Comparison of FAA Air Traffic Funding and Workload Measures
(Volume of Activity in Millions)
(Dollars in Thousands)

	FY 1998 Actual Funding & Workload Measures	Percentage Change (FY 1998 – FY 1999)	FY 1999 Actual Funding & Workload Measures	Percentage Change (FY 1999 – FY 2000)	FY 2000 Estimated Funding & Workload Measures	Percentage Change (FY 2000 – FY 2001)	FY 2001 Estimated Funding & Workload Measures
Centers:							
Funding	$945,553	11.58%	$1,054,498	11.80%	$1,178,905	8.70%	$1,281,437
IFR Aircraft	42.0	1.43%	44.7	2.24%	45.7	2.41%	46.8
Towers:							
Funding	$1,015,532	12.11%	$1,124,341	11.78%	$1,256,815	8.41%	$1,362,551
Aircraft Ops	63.4	1.10%	68.1	2.06%	69.5	2.01%	70.9
Stations:							
Funding	$276,610	7.83%	$283,164	7.36%	$304,000	4.76%	$318,474
Flight Svcs.	48.5	1.03%	32.4	-0.31%	32.3	-0.31%	32.2

WORKLOAD MEASURES AND INDUSTRY TRENDS

The chart below reflects the forecasted controller work force and the projected instrument operations (in thousands) at airports with FAA traffic control service. The column on the far rights is the instrument operations (in thousands) at air route traffic control centers (ARTCC's).

Year	CWF	IOPS (Terminals)	IOPS (ARTCC's)
1997	17,388	48,128.2	41,411.8
1998	17,756	49,272.9	43,196.0
1999	17,639	51,110.3	44,654.4
2000	17,599	52,087.7	45,653.5
2001	17,599	53,237.8	46,765.5

Source.—FAA Aviation Forecasts fiscal years 2000–2011, March 2000 edition.

CONTROLLER WORKFORCE AND INSTRUMENT OPERATIONS

Year	CWF	Percent change	IOPS (Terminals)	Percent change	IOPS (ARTCC's)	Percent change
1996	17,080	.....	46,628.5	.....	40,419.4	.....
1997	17,388	1.80	48,128.1	3.22	41,375.4	2.37
1998	17,756	2.12	49,272.9	2.38	43,196.0	4.40
1999	17,639	−0.66	51,110.3	3.73	44,654.4	3.38
2000	17,599	−0.23	52,087.7	1.91	45,653.5	2.24
2001	17,599	.....	53,237.8	2.21	46,765.5	2.44

ACCIDENT AND FATALITY RATES

Question. Please update the line graph showing the rate of accidents per 100,000 departures for part 121 air carriers shown on page 554, the table on page 556, and the table on page 558 relating to general aviation accidents from last year's House hearing record.

Answer. The table and line graphs follow.

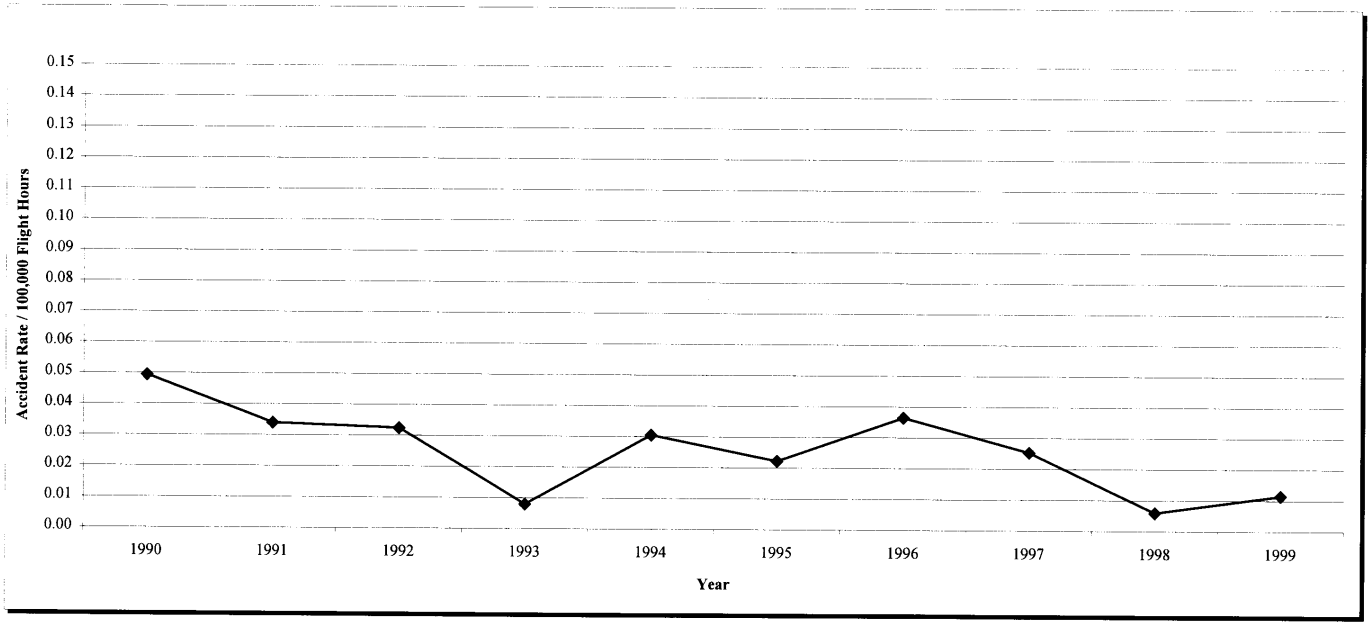
PART 121 CASUALTIES

	1997	1998	1999
Fatal	8	1	12
Serious	38	28	57
Minor	128	87	158

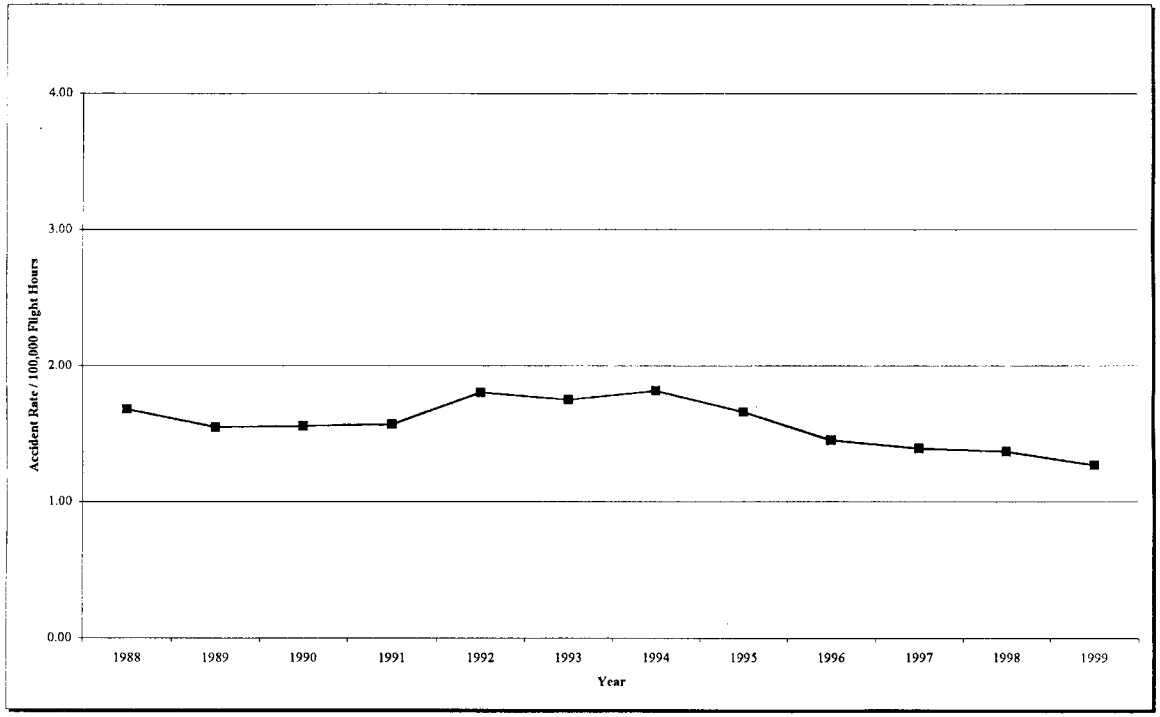
Part 121 Fatal Accident Rates For U.S. Air Carriers

(Per 100,000 Flight Hours)

(1990-1999)



General Aviation Fatal Accident Rates
(Per 100,000 Flight Hours)
(1988 -1999)



ADVISORY COMMITTEES

Question. Please provide information on FAA's advisory committees including the name of the committee, its purpose, and the estimated fiscal year 2001 cost as well as the actual fiscal year 2000 cost.

Answer. The following chart displays each committee, its purpose, and the estimated fiscal year 2001 cost as well as the actual year 2000 cost.

Name	Purpose	Fiscal year	
		2000 cost	2001 estimate
Air Traffic Procedures Advisory Committee.	Reviews air traffic control procedures and practices.	$44,361	$50,026
RTCA, Inc., (Utilized as an Advisory Committee).	Advances the art and science of aviation and aviation electronic systems.	300,000	380,000
Aviation Security Advisory Committee	Examines all areas of civil aviation security with the aim of increasing safety for the traveling public.	89,000	60,000
Aviation Rulemaking Advisory Committee.	Provides advice and recommendations on FAA's rulemaking activities.	110,000	105,000
Research, Engineering, and Development Advisory Committee.	Provides advice on aviation research needs.	150,000	183,000
Commercial Space Transportation Advisory Committee.	Provides advice on all aspects of U.S. commercial space transportation activities.	41,200	41,850
Aging Transport Systems Rulemaking Advisory Committee.	Provides advice on the aging transport airplane systems.	50,000	50,000
Total	784,561	869,876	

FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER (FFRDC) SERVICES

Question. The Committee is aware that the FAA has expressed an intention to sole source contract for FFRDC services. Please provide the rationale for a sole source contract and a summary of the services with estimated cost for each broad category of services anticipated under a sole source contract. Concerns have been expressed that the current use of the FFRDC by the FAA is more akin to a Systems Engineering and Technical Assistance (SETA) contract than an actual independent expert capability. What is the FAA position as relates to the need for FFRDC services as opposed to SETA capabilities?

Answer. In September 1990, as the result of a Memorandum of Agreement with the MITRE Corporation, the FAA sponsored MITRE to operate a FFRDC. The Sponsoring Agreement was renewed on April 9, 1996 effective for the five-year period ending April 8, 2001. MITRE operates the FAA's FFRDC as an identifiable, separate operating unit.

The current eight-year research and development contract with MITRE Corporation for the operation of the FFRDC was awarded in December 1992 and expires on November 30, 2000. Prior to extending the contract or agreement with an FFRDC, acquisition directives require that the sponsoring agency conduct a comprehensive review of the use and continued need for the FFRDC. Based on the results of the recently completed comprehensive review, it has been reaffirmed that a strong need exists for continued support by the Center for Advanced Aviation System Development (CAASD). CAASD performs studies, analysis and concept formulation for continued advanced aviation research for the Capital Investment Plan (CIP) and National Airspace System (NAS). Work assignments are approved by the FFRDC Executive Board (FEB) and are contained in annual Product Based Work Plans (PBWPs). Support for the following FAA programs is included:

—Free Flight Phase 1
—Communications Navigation Surveillance Operational Capability
—Navigation Architecture
—NAS Architecture Implementation
—Near Term Procedural Enhancements
—Airspace Design and Analysis
—User Performance Planning and Research

—NAS Integration
—NAS Infrastructure Management

Only work that is appropriate to be performed by a research and development FFRDC is authorized and approved for incorporation in the annual CAASD work plan. Support that is appropriately performed by a technical assistance contractor or any other contractor is not approved for performance by CAASD. The fiscal year 2000 PBWP is currently under development.

A market analysis was conducted in accordance with the requirements of the FAA's Acquisition Management System (AMS) to determine the availability of the needed research and analysis services. Evaluation criteria included demonstrated technical capability in all of the following areas: operations research, computer science, electrical and mechanical engineering; demonstrated experience in highly specialized simulation and computer modeling techniques and facilities to model improvements across a broad spectrum of NAS systems and operations; demonstrated capability to provide the main technical linkage between the operational and the development requirements of FAA organizations; demonstrated capability to support the FAA in rapidly and effectively formulating new programs to meet emerging operational needs; demonstrated capability to provide rapid response to safety issues affecting the aviation community, and Congressional interests and mandates; prior experience in support services for the FAA communications system, including current programs that require digital technology applications; demonstrated capability to provide services related to the major operational functions of aircraft separation and flight planning, and the problem of ATC system capacity; and background knowledge in behavioral science and/or human performance as related to the major NAS areas. These capabilities are required of any source selected for operation of the FFRDC, because all too often, multiple capabilities are needed quickly to meet program needs.

As a result of this market analysis, it was concluded that MITRE is the only responsible source that can provide a comprehensive and synergistic approach in all required areas. MITRE has the demonstrated capability to meet the interrelated system requirements in the functional areas and furnish the experienced professional staff needed to complete ongoing CIP and NAS programs.

The FAA has taken steps to promote the use of subcontractors, where appropriate, in specialized technical areas that are in support of the major task assignments. The FAA has also taken action to award other major contracts in support of the NAS on a full and open competitive basis.

These competitively awarded contracts include the NAS Implementation Support Contract (NISC), Technical Support Services Contract, the System Engineering Technical Assistance Contract, various Communications, Navigation and Surveillance Technical Assistance Contracts, and the Air Traffic Systems Development Technical Assistance Contract. The level of services called for in these contracts, however, do not entail anywhere near the complexity of needed skills and knowledge provided by the CAASD in requisite functional areas of expertise.

RTCA CHARTER

Question. Please provide a summary of the RTCA charter, the organizational and management structure, and a current list of members.

Answer. FAA Order (1110.77M) constitutes the charter for the utilization of RTCA, Inc. as an advisory committee. It describes the objectives and scope of activities (to seek solutions to problems involving the application of technology to aeronautical operations that impact the future air traffic management system); the organization (comprised of a general membership, a chairman, a board of directors, a Program Management Committee (PMC), a president and a vice president); administration (FAA key officials are members of the RTCA policy board, the PMC oversees the establishment and workings of the special committees, meetings are scheduled, held, and conducted in accordance with provisions of the Federal Advisory Committee Act). The charter also addresses public participation and availability of records.

RTCA, Inc. also has its own charter as a not-for-profit corporation. Within its charter, the stated objectives address the scientific and educational purpose of the corporation, which is to advance the art and science of aviation and aviation electronic systems for the benefit of the public. The RTCA specific objective list includes those also contained in the FAA Order; they are:

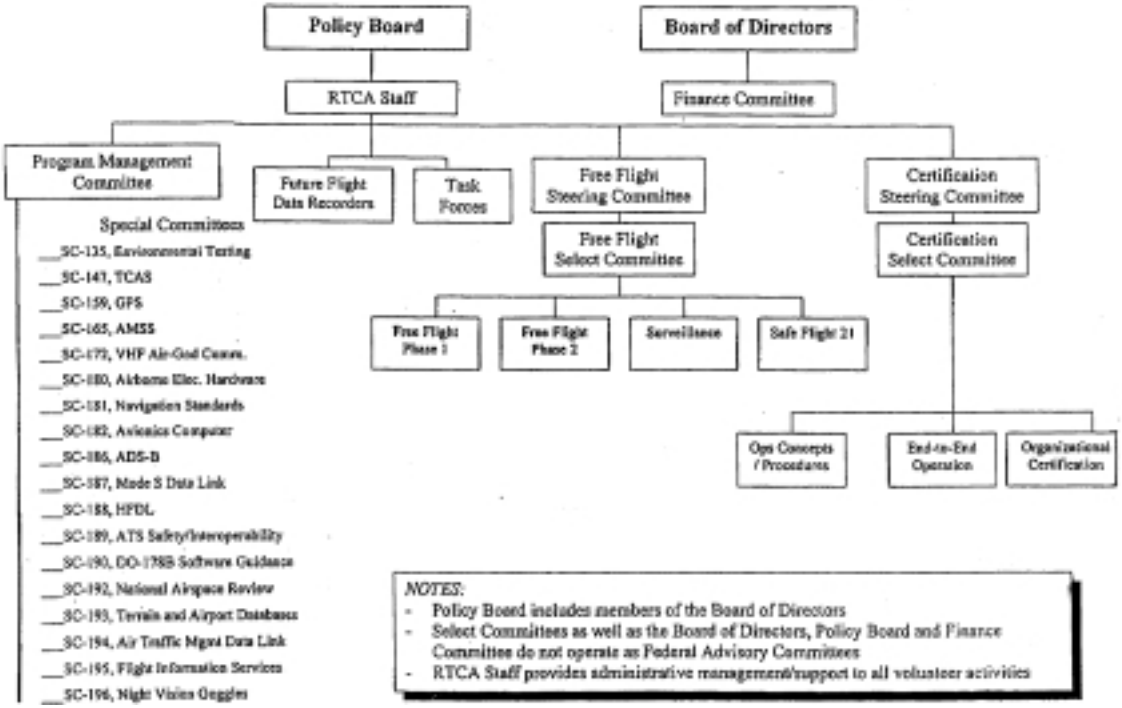
—"coalesce aviation system user and provider technical requirements in a manner that helps government and industry meet their mutual objectives and responsibilities;

—analyze and recommend solutions to the system technical issues that aviation faces as it continues to pursue increased safety, system capacity and efficiency;
—develop consensus on the application of pertinent technology to fulfill user and provider requirements, including development of minimum operational performance standards for electronic systems and equipment that support aviation;
—assist in developing the appropriate technical material upon which positions for the International Civil Aviation Organization, the International Telecommunications Union, and other appropriate international organizations can be based; as well as
—conduct the Corporation's affairs in a manner such that its integrity remains beyond challenge."

The RTCA management and organizational structure is depicted in the following chart. It shows the relationship between the Policy Board, the Program Management Committee and Special Committee activities, as well as the Steering and Select Committee activities.

The current list of members also follows. It reflects 150 industry member organizations, plus 58 international associate members, plus five academic associate members, as well as the eight government members—for a total of 221. Government members include: Federal Aviation Administration, DOT Volpe National Transportation Systems Center, National Aeronautics and Space Administration, National Center for Atmospheric Research, United States Air Force, United States Army, Department of Commerce, and United States Navy.

RTCA


Policy Board
Board of Directors
RTCA Staff
Finance Committee
Program Management Committee
Future Flight Data Recorders
Task Forces
Free Flight Steering Committee
Certification Steering Committee
Free Flight Select Committee
Certification Select Committee
Free Flight Phase 1
Free Flight Phase 2
Surveillance
Safe Flight 21
Ops Concepts / Procedures
End-to-End Operation
Organizational Certification
Special Committees
__SC-135, Environmental Testing
__SC-147, TCAS
__SC-159, GPS
__SC-165, AMSS
__SC-172, VHF Air-Gnd Comm.
__SC-180, Airborne Elec. Hardware
__SC-181, Navigation Standards
__SC-182, Avionics Computer
__SC-186, ADS-B
__SC-187, Mode S Data Link
__SC-188, HFDL
__SC-189, ATS Safety/Interoperability
__SC-190, DO-178B Software Guidance
__SC-192, National Airspace Review
__SC-193, Terrain and Airport Databases
__SC-194, Air Traffic Mgmt Data Link
__SC-195, Flight Information Services
__SC-196, Night Vision Goggles
NOTES:
- Policy Board includes members of the Board of Directors
- Select Committees as well as the Board of Directors, Policy Board and Finance Committee do not operate as Federal Advisory Committees
- RTCA Staff provides administrative management/support to all volunteer activities

RTCA

Current RTCA Membership Control List

Updated as of 4/11/00

New Members in ***Bold/Italics***

MEMBERS

ANSER
ARINC, Incorporated
ATN Systems, Inc.
Adsystech, Inc.
Advance Management Technology, Inc.
Aerospace Displays System, Inc.
Air Line Pilots Association
Air Transport Association of America
Aircell, Inc.
Aircraft Owners & Pilots Association
Airport Systems International
Airports Council International - NA
Airsys ATM, Inc.
Air Traffic Software Architecture, Inc.
Alaska Airlines, Inc.
Aloha Airlines, Inc.
AlternaSource, Inc.
American Eagle (RAA)
America West Airlines
American Airlines
Atlantic Coast Airlines (RAA)
AvCom, Inc.
Aviation Management Associates, Inc.
Avidyne Corporation
AvioniCon
AvroTec, Inc.
BAE Systems (Formerly Marconi Aerospace Avionics, Inc.)
BAE Systems Flight, Inc. (Formerly Marconi Flight Systems, Inc.)
BFGoodrich Aircraft Sensors Division
BFGoodrich Avionics Systems
BLR Group of America, Inc.
CNS Systems, Inc.
CSSI, Inc.
Certification Services, Inc.
Cessna Aircraft Company
Coleman Research Corporation
Comair (RAA)
Computer Sciences Corporation
Consultant d' Avionics

RTCA

Current RTCA Membership Control List

Updated as of 4/11/00

New Members in ***Bold/Italics***

Continental Airlines, Inc.
Continental Express (RAA)
Conwal Incorporated
Corbin, Krystin & Associates, Inc.
Crown Communications, Inc.
Cubic Communications, Inc.
DCS Corporation
DHL Airways, Inc.
DIBRITOM Corporation
Defense Concept Associates, Inc.
Delta Air Lines, Inc.
ELDEC Corporation
Engineering Dynamics, Inc.
Eventide, Inc.
Evergreen International Airlines, Inc.
Experimental Aircraft Association
Federal Express Corporation
Ferrell & Associates Consulting, Inc.
Foliage Software Systems, Inc.
Ford Motor Company
GARMIN International
Gables Engineering, Inc.
General Aviation Manufacturers Association
General Motors Corporation
Global Simulation Systems. Inc.
Gentex Corporation
Geospec, Inc.
Hamilton Sundstrand Corporation
Harris Corporation
Hawaiian Airlines, Inc.
Helicopter Association International
HMI Solutions LLC
Honeywell International (Olathe, KS)
Horizon (RAA)
IFR Americas, Inc.
ITT Industries (Stanford Telecommunications)
In Flight Weather
Innovative Solutions International, Inc.
IntegriNautics Corporation
L3 Communications Interstate Electronics Corporation (Formerly Interstate Electronics Corp.)
JWN Consultants
Jansky/Barmat Telecommunications

RTCA

Current RTCA Membership Control List

Updated as of 4/11/00

New Members in ***Bold/Italics***

Jeppesen-Sanderson Inc.
Jerry Thompson & Associates, Inc.
Kaman Aerospace Corporation
Kernkamp Industires Corp.
Kollsman, Inc.
L-3 Communications
Landrum & Brown
Litton Industries, Inc.
Lockheed Martin Corporation
Mesa(RAA)
Mesaba(RAA)
Midway Airlines (RAA)
MIT Lincoln Laboratory
MITRE Corporation
MTP Associates
Mulkerin Associates Inc.
NAVSAT International
National Aeronautic Association
National Air Traffic Controllers Association
National Aviation Research Institute
National Business Aviation Association
Nelson S. Allan III
Noegenesis
Northrop Grumman Corporation
Northstar Technologies
Northwest Airlines, Inc.
OPTIMUS Corporation
Overlook Systems Technologies, Inc.
Piedmont Airlines (RAA)
Professional Airways Systems Specialists
Project Management Enterprises Inc.
Rannoch Corporation
Raytheon Systems Company
Rockwell Collins
Ryan International Corporation
SAIC
Sandel Avionics
Seagull Technology, Inc.
Sedona Scientific, Inc.
Sensis Corporation
Sierra Data Systems, Inc.
SkyComm, Inc.

RTCA

Current RTCA Membership Control List

Updated as of 4/11/00

New Members in *Bold/Italic*

Skywest (RAA)
Small Aircraft Manufacturers Association
Soaring Society of America
Southwest Airlines Company
Strategic Technology Institute
System Resources Corporation
TASC
TUV Product Service
Teledyne Controls
Telenergy
Telephonics Corporation
Time Domain Corporation
The Boeing Company
The Institute of Navigation
The Nordam Group, Nordam Texas
The Preston Group (TPG)
Trans World Airlines, Inc.
Trimble Navigation
Trios Associates, Inc.
UNITECH
UPS Aviation Technologies (formerly II Morrow, Inc.)
US Airways
United Airlines, Inc.
United Parcel Service
Universal Avionics Systems Corporation, WA
VEROCEL, Inc.
Washington Laboratories, Ltd.
Wulfsberg Electronics Division

Member Control Number.....150

RTCA

Current RTCA Membership Control List

Updated as of 4/11/00

New Members in ***Bold/Italics***

INTERNATIONAL ASSOCIATES

ARRUSRIRE
Airservices Australia
Airways Corporation of New Zealand Ltd.
Avionitek, Inc.
Aviso, Inc.
Bombardier Aerospace
CARERI
BAE Systems Canada, Inc.(Formerly Canadian Marconi Company)
Centre For Airborne Systems, Bangalore
Civil Aeronautics Administration MOTC, ROC
Civil Aviation Bureau of Japan
D&F Gesellschaft Fur Daten-System
DERA, ATC Systems Group
DFS Deutsche Flugsicherung GmbH
ELSAT GmbH
EMBRAER
EUROCAE
EUROCONTROL
Electronic Industries Association of Japan
FDC Belguim
Federation Aeronautique International
Finnish Defence Material Establishment (DME)
Frequentis Network Systems GmbH
GMV (Spain)
Icelandic Civil Aviation Administration
IFEN GmbH
INMARSAT
International Air Transport Association
Israel Aircraft Industries, LTD
Japan Air Lines Company
Japan Radio Air Navigation Systems Association
Kongsberg Gruppen ASA, Aerospace
Kuerzi Avionics AG
LITEF GmbH
McMurdo Ltd.
NAV Canada
NEC Corporation, ATC Systems
NovAtel, Inc.
PT Garuda Indonesia
Pelorus Navigation Systems Inc.

RTCA

Current RTCA Membership Control List
Updated as of 4/11/00
New Members in ***Bold/Italics***

Racal Avionics Limited
RGM SpA
Reutech Defence Industries
Rohde & Schawrz, Inc.
Royal Australian Air Force
Royal Norwegian Air Force
SKYSOFT PORTUGAL, S.A.
Sennheiser Electronic Corporation
Sextant Avionique - APN/SC
SITA
Smiths Industries
Society of Japanese Aerospace Companies
Swedish Defence Material
TEAM, Inc.
Thompson CSF Detexis (formerly Dassault)
Toshiba Corporation
Transport Canada
UK - Civil Aviation Authority

International Associate Control Number.....58

ACADEMIC ASSOCIATES

Embry-Riddle Aeronautical University
George Mason University, Sch of Info Tech & Eng.
Stanford University
Ohio University
The Johns Hopkins University, Appl Physics Lab.

Academic Associate Control Number.....5

GOVERNMENT MEMBERS

Federal Aviation Administration
Volpe National Transportation Systems Center

RTCA

Current RTCA Membership Control List

Updated as of 4/11/00

New Members in ***Bold/Italics***

National Aeronautics & Space Administration
National Center for Atmospheric Research
U. S. Air Force
U. S. Army
U. S. Department Of Commerce
U. S. Navy

Government Member Control Number **8**

Total RTCA Members **221**

Note: The above is an alphabetized control list for RTCA Members from Government, Industry, Academic Associates and International Associates. The Control Number represents the total number of members at the above given date. This list and number is updated periodically and is current as of the date indicated.

RTCA ACTIVITIES

Question. What activities is the RTCA anticipated to conduct in fiscal year 2001?

Answer. FAA anticipates RTCA involvement in the following activities in fiscal year 2001 Special Committees (SC):

—SC–135—Environmental Testing
—SC–147—Traffic Alert & Collision Avoidance System
—SC–159—Global Positioning System
—SC–165—Aeronautical Mobile Satellite Service
—SC–172—VHF Air-Ground Communication
—SC–181—Navigation Standards
—SC–186—Automatic Dependent Surveillance-Broadcast
—SC–188—High Frequency Data Link
—SC–189—Air Traffic Services Safety and Interoperability Requirements
—SC–190—Application Guidelines for RTCA/DO–178B (Software)
—SC–192—National Airspace Review Planning and Analysis
—SC–193—Terrain and Airport Databases
—SC–194—Air Traffic Management Data Link Implementation
—SC–195—Flight Information Services Communications
—SC–196—Night Vision Goggles

Steering/Select Committees:
—Free Flight Steering Committee and Free Flight Select Committee
—Certification Steering Committee and Certification Select Committee

Policy Board Committees: Future Flight Data Recorders

RTCA ACTIVITIES SELECTION PROCESS

Question. How are RTCA activities selected? How are group members selected? What types of Chinese wall arrangements are created to make sure that the roles of manager, facilitator, and contractor do not become blurred?

Answer. The determination of activities is the decision of the FAA Administrator. The following process is used to select members for the various activities: Special Committee members are volunteers who have an interest in the subject being addressed by the committee. Members can come from across the full spectrum of the aviation community—government and industry, users and suppliers, labor and management, airports, service providers—and often include people from the international as well as the domestic segments of the global aviation community. The public and the aviation community are notified that a new Special Committee is being formed via an announcement in the Federal Register. It is important to note that because the committees are open and inclusive, anyone may participate at any time without an invitation. If, after the committee is organized, RTCA or the committee determines that the perspectives of an individual or organization not currently participating in the Special Committee are relevant to the committee's deliberations, RTCA will extend an invitation to participate in the committee's deliberations. All subsequent plenary meetings of the committee are announced in the Fed-

eral Register. (Membership in working groups under Special Committees is generally drawn from the Special Committee membership, although others with a relevant perspective are encouraged to participate in working group activities when appropriate and needed. The results of working group activities are provided to the Special Committee for consideration by the full committee when the committee meets in plenary session.)

The membership process and criteria for an RTCA Task Force and subordinate working groups parallels that of Special Committees.

Membership on the Government/Industry Free Flight Steering Committee is by appointment. FAA and the RTCA Policy Board identify potential Steering Committee members based on their organizational responsibilities, professional experience, interest in Free Flight issues being considered, and their group "problem solving" skills. If the desired individual is interested in voluntarily serving on the committee and their parent organization concurs with their appointment, they are appointed to Steering Committee membership. Steering Committee membership is dominated by operationally oriented organization representatives given the safety, capacity, and efficiency nature of the committee's mission. Some rotation occurs on an annual basis. The process is documented and is available for review at RTCA. The Free Flight Steering Committee only meets in plenary session. All meetings are announced in the Federal Register. All meetings are open to the public and the public is afforded an opportunity to express its views throughout the meetings.

Membership on the Free Flight Select Committee (the working arm of the Steering Committee) is by appointment. The process and criteria of identifying Select Committee members are similar to those used in identifying Steering Committee members. Select Committee tasking flows from the Steering Committee. Select Committee meetings are not open to the public. Select Committee working group membership is usually drawn from Select Committee membership; however, as in the case for Special Committee working groups, other people with relevant perspectives and professional experience can be and are invited to participate in working group deliberations. The process is documented and is available for review at RTCA.

Membership for the Certification Steering and Select Committees follows the process described for the Free Flight committees.

There are no arrangements to segregate the roles of participants in RTCA activities. The fundamental premises upon which the RTCA consensus-based process is based are as follows:

Acknowledge the inevitability of "conflict of interest" among the disparate aviation community groups/individuals; for example, government and industry, users and suppliers, labor and management, commercial and general aviation, airports, and service suppliers.

Fully consider the diverse interests of these groups/individuals and use the RTCA open, inclusive, consensus-based process to develop recommendations that remove the parochial views of any one group. The resulting recommended course of action serves the best interests of the aviation community and the public.

CONTROLLER PAY AGREEMENT

Question. What is the current estimate of the NATCA controller pay agreement cost? What percentage of the total dollar value of this agreement does the agency calculate will be offset through productivity gains and other quantifiable savings resulting from the agreement itself? What is the total aggregate savings resulting from the agreement to date—what is the cost of the agreement to date?

Answer. During the first part of fiscal year 1999, the FAA and NATCA worked to finalize the rules associated with the various productivity articles of the contract and the rules for the new pay system. A metrics team was established to identify and track measurable results of implementing the contract. Early indications from this effort are showing some positive trends, and the FAA will continue to refine and analyze this data to provide additional information to Congress on the results of this contract.

There are many indirect results of the contract with NATCA, including an improved and more productive working relationship between FAA management and NATCA in modernizing the aviation system. An example of this partnership is the manner in which Display System Replacement (DSR) has been fielded throughout the country, resulting in FAA completing many facilities well ahead of schedule. Another example is the STARS program; FAA has fielded the first segment at El Paso and Syracuse and is working on the advanced configurations of that program.

STAFFING STANDARD

Question. Please provide a table that lists for fiscal years 1995 through 2001 the staffing standard generated by the FAA systematically-derived requirement figures, the actual number of controllers, the differences, the average compensation per controller, and the aggregate cost differential (negative or positive) of the actual staffing level compared to the staffing standard multiplied by the average compensation in each given year.

Answer. The following table provides the information requested.

Fiscal year	Staffing standard (SS)	Actual on board (AOB)	AOB–SS	Average compensation per controller	Aggregate cost differential (dollars in thousands)
1995	14,232	14,614	382	$81,021	$30,949.9
1996	14,691	14,360	−331	83,728	−27,717.1
1997	14,261	14,588	327	86,240	28,200.6
1998	14,207	14,966	759	92,856	70,326.3
1999	14,282	14,902	620	104,747	64,943.3
2000	14,782	[1] 15,000	218	120,826	26,340.1
2001	15,210	[1] 15,000	−204	124,572	−25,412.7

[1] Estimated.

BACKFILL OVERTIME

Question. Please provide backfill overtime data from 1995 through 2001.

Answer. The backfill overtime usage for fiscal years 1995 through 1998 averaged $3–4,000,000 per year.

In fiscal year 1999, the backfill overtime significantly increased to $16,119,040 due to the DSR in eight air route traffic control centers.

It is projected that there will be $17,715,868 spent in backfill overtime to support the transition of the remaining ten air route traffic control centers and the installation of the Center TRACON Automation System (CTAS) at two sites in fiscal year 2000.

The current projections for fiscal year 2001 in backfill overtime are $24,000,000. This figure covers the costs for developmental and training activities associated with bringing new systems on-line and operational in facilities, such as the Standard Terminal Automation Replacement System (STARS) in terminal facilities, and the Automated Radar Terminal System Color Displays (ACD) that will be installed in fiscal year 2001 at terminal facilities that are not scheduled to receive STARS. The current schedule for CTAS includes installation at six sites, which requires instructor training, training of the controllers, transition in the en route and terminal facilities, and developmental activities for future site installations.

Additionally, there are several large TRACON's scheduled for building and occupancy in fiscal year 2001. These facilities include Atlanta, Northern California, and Potomac. These facilities will be consolidating personnel and cross-training them in the different areas to ensure that safety of the air traffic system is not compromised. All of the aforementioned programs will require training and transition time before the systems can become operational in the air traffic environment.

CONTROLLER WORKFORCE

Question. Please update the table from page 571 of last year's House hearing record on Controller Work Force (CWF) end of year employment for fiscal years 1996 through 2001.

Answer. The following table provides the information requested. The table shows the traffic management coordinators (TMC) and traffic management supervisors (TMS) as a separate entry. The TMC/TMS are part of the controller work force.

	Fiscal year				
	1997	1998	1999	2000 estimate	2001 estimate
Center:					
Controllers	6,425	6,639	6,607	6,635	6,635
Ops Supervisors (1st Line Sup)	825	812	790	755	755

	Fiscal year				
	1997	1998	1999	2000 estimate	2001 estimate
TMC/TMS	558	526	567	553	553
Center Controller Work Force	7,808	7,977	7,964	7,943	7,943
Towers:					
Controllers	8,163	8,327	8,295	8,330	8,330
Ops Supervisors (1st Line Sup)	1,261	1,276	1,177	1,129	1,129
TMC/TMS	156	176	203	197	197
Tower Controller Work Force	9,580	9,779	9,675	9,656	9,656
Centers/Towers Combined:					
Controllers	14,588	14,966	14,902	14,965	14,965
Ops Supervisors (1st Line Sup)	2,086	2,088	1,967	1,884	1,884
TMC/TMS	714	702	770	750	750
Total Controller Work Force	17,388	17,756	17,639	17,599	17,599

UNION TIME

Question. Please provide the estimated time granted by FAA managers for union activities for fiscal years 1995 through 2001.

Answer. Listed below are the estimated hours granted by FAA managers for union activities for fiscal years 1995 through 2001.

Fiscal year	*Hours (estimate)*
1995	302,566
1996	302,566
1997	302,566
1998	394,351
1999	489,956
2000	457,339
2001	457,339

CONTRACT TOWERS

Question. How much funding is included in the fiscal year 2001 budget request to run contract towers. How much was included in the fiscal year 2000 budget request? How much is anticipated being spent on contract towers in fiscal year 2000?

Answer. The fiscal year 2001 includes $55,600,000 for the contract tower program. The fiscal year 2000 budget request included $55,600,000 for the contract tower program. We anticipate spending the full $55,600,000 during fiscal year 2000 on contract towers.

OPERATIONAL ERRORS

Question. Please update the table on page 583 of last year's House hearing record relating to operational errors at contract towers and FAA facilities from fiscal year 1993 through fiscal 2000 (if partial year data is available). Do you have confidence in your operational error data?

Answer. The following tables provide the information requested.

OPERATIONAL ERRORS FAA— LEVEL I FACILITIES VS. CONTRACT TOWERS

	Fiscal year						
	1993	1994	11995	1996	1997	1998	1999
FAA Facilities	4	5	2	4	2	6	[1] 2

OPERATIONAL ERRORS FAA— LEVEL I FACILITIES VS. CONTRACT TOWERS—Continued

	Fiscal year						
	1993	1994	11995	1996	1997	1998	1999
Contract Towers	2	.....	2	3	10	6	7

[1] The last 22 FAA Level 1 towers were converted to contract towers on October 1, 1999. There were 163 contract towers at the end of fiscal year 1999.

OPERATIONAL ERROR RATE—FAA LEVEL I FACILITIES VS. CONTRACT TOWERS—CENTER

[Errors per 100,000 Operations]

	Fiscal year						
	1993	1994	1995	1996	1997	1998	1999
FAA Facilities	0.05	0.03	0.02	0.09	0.10	0.05	0.11
Contract Towers	0.12	.....	0.04	0.04	0.08	0.05	0.05

Note.—Fiscal year 2000 numbers are not available. At the beginning of fiscal year 2000, all FAA Level I towers were converted to contract towers. The data is validated for accuracy by the Air Traffic Investigations Office and entered into a database, which is retained by the FAA.

Question. Are some facilities more a problem with respect to operational errors than others? Which ones?

Answer. There is no defined trend or problem facilities in the Federal contract tower program. Operational errors continue to be a very rare occurrence. The FAA is working to further reduce this already low figure.

Question. Please update the table on pages 594–598 of last year's House hearing recording relating to en route operational errors.

Answer. The following table breaks down the total number of en route operational errors for the past five fiscal years.

Facility	Location	Fiscal year				
		1995	1996	1997	1998	1999
En route operational errors:						
Albuquerque (ZAB)	8000 Louisiana Blvd., NE Room 1014 Albuquerque, NM 87109.	20	21	13	7	22
Anchorage (ZAN)	5400 Davis Highway Anchorage, AL 99506	3	2	3	4	9
Atlanta (ZTL)	299 Woolsey Road Hampton, GA 30228	51	36	38	41	52
Boston (ZBW)	Boston ARTCC 35 Northeastern Blvd. Nashua, NH 03062.	6	13	12	15	12
Chicago (ZAU)	619 Indian Trail Road Aurora, IL 60506	28	26	22	36	41
Cleveland (ZOB)	326 East Lorain Street Oberlin, OH	30	32	27	46	48
Denver (ZDV)	2211—17th Avenue Longmont, CO	17	11	14	14	20
Fort Worth (ZFW)	13800 FAA Road Fort Worth, TX 76039	17	23	16	21	18
Houston (ZHU)	Intercontinental Airport 2700 West Terminal Road Houston, TX 77032-0032.	17	7	8	9	15
Indianapolis (ZID)	Indianapolis Int'l Airport 1850 S. Sigsbee Street Indianapolis, IN 46241.	38	39	29	48	55
Jacksonville (ZJX)	811 E. Second Street P.O. Box 98 Hilliard, FL 32046.	21	27	27	25	24
Kansas City (ZKC)	250 S. Rogers Road Olathe, KS 66062-1689	36	20	18	26	26
Los Angeles (ZLA)	2555 East Avenue Palmdale, CA 93550-2112	20	19	24	27	22
Memphis (ZME)	3229 Democrat Road Memphis, TN 38118	18	21	25	26	21
Miami (ZMA)	7500 N. W. 58th Street Miami, FL 33166	21	15	14	14	14
Minneapolis (ZMP)	512 Division Street Farmington, MN 55024	10	13	10	14	23
New York (ZNY)	4205 Johnson Avenue Ronkonkoma, NY 11779	40	44	41	46	47
Oakland (ZOA)	5125 Central Avenue Fremont, CA 94536-6531	11	20	17	12	21
Salt Lake (ZLC)	2150 West 700 North Salt Lake City, UT 84116	11	8	9	9	3
San Juan CERAP (ZUA)	DOT/FAA San Juan CERAP/GPO Section San Juan, PR 00936.	.....	1	.....	.....	.....
Seattle (ZSE)	ARTCC Building 3101 Auburn Way S. Auburn, WA 98092.	16	9	3	5	6

Facility	Location	Fiscal year				
		1995	1996	1997	1998	1999
Washington (ZDC)	825 East Market Street Leesburg, VA 20041	22	24	25	42	74
Total		453	431	395	487	573
Operational Errors by Calendar Year:						
Albuquerque (ZAB)	8000 Louisiana Blvd., NE Room 1014, Albuquerque, NM 87109.	23	17	14	8	26
Anchorage (ZAN)	5400 Davis Highway Anchorage, AL 99506	2	2	4	4	10
Atlanta (ZTL)	299 Woolsey Road Hampton, GA 30228	49	43	33	43	61
Boston (ZBW)	Boston ARTCC 35 Northeastern Blvd. Nashua, NH 03062.	6	15	16	15	12
Chicago (ZAU)	619 Indian Trail Road Aurora, IL 60506	29	24	26	47	46
Cleveland (ZOB)	326 East Lorain Street Oberlin, OH	34	32	30	47	51
Denver (ZDV)	2211—17th Avenue Longmont, CO	19	11	13	15	24
Fort Worth (ZFW)	13800 FAA Road Fort Worth, TX 76039	20	20	16	18	21
Houston (ZHU)	Intercontinental Airport 2700 West Terminal Road Houston, TX 77032-0032.	12	8	11	7	19
Indianapolis (ZID)	Indianapolis Int'l Airport 1850 S. Sigsbee Street Indianapolis, IN 46241.	33	38	33	49	57
Jacksonville (ZJX)	811 E. Second Street P.O. Box 98 Hilliard, FL 32046.	25	28	26	23	30
Kansas City (ZKC)	250 S. Rogers Road Olathe, KS 66062-1689	26	23	20	26	28
Los Angeles (ZLA)	2555 East Avenue P Palmdale, CA 93550-2112	20	17	26	28	22
Memphis (ZME)	3229 Democrat Road Memphis, TN 38118	20	26	22	25	25
Miami (ZMA)	7500 N. W. 58th Street Miami, FL 33166	21	16	13	11	18
Minneapolis (ZMP)	512 Division Street Farmington, MN 55024	10	16	7	19	21
New York (ZNY)	4205 Johnson Avenue Ronkonkoma, NY 11779	40	46	44	44	49
Oakland (ZOA)	5125 Central Avenue Fremont, CA 94536-6531	12	23	15	16	16
Salt Lake (ZLC)	2150 West 700 North Salt Lake City, UT 84116	14	6	10	7	4
San Juan CERAP (ZUA)	DOT/FAA San Juan CERAP/GPO Section San Juan, PR 00936.	.....	1	.....	.....	.....
Seattle (ZSE)	ARTCC Building 3101 Auburn Way S. Auburn, WA 98092.	15	9	1	5	6
Washington (ZDC)	825 East Market Street Leesburg, VA 20041	23	18	31	53	75
Total		453	439	411	510	621
Error Rate by Fiscal Year:						
Albuquerque (ZAB)	8000 Louisiana Blvd., NE Room 1014 Albuquerque, NM 87109.	1.35	1.33	0.84	0.40	1.07
Anchorage (ZAN)	5400 Davis Highway Anchorage, AL 99506	0.54	0.37	0.51	0.62	1.51
Atlanta (ZTL)	299 Woolsey Road Hampton, GA 30228	2.07	1.47	1.52	1.54	1.86
Boston (ZBW)	Boston ARTCC 35 Northeastern Blvd. Nashua, NH 03062.	0.35	0.76	0.68	0.75	0.65
Chicago (ZAU)	619 Indian Trail Road Aurora, IL 60506	0.97	0.90	0.77	1.29	1.44
Cleveland (ZOB)	326 East Lorain Street Oberlin, OH	1.10	1.12	0.94	1.53	1.53
Denver (ZDV)	2211—17th Avenue Longmont, CO	1.19	0.73	0.88	0.86	1.21
Fort Worth (ZFW)	13800 FAA Road Fort Worth, TX 76039	0.80	1.08	0.76	0.97	0.83
Houston (ZHU)	Intercontinental Airport 2700 West Terminal Road Houston, TX 77032-0032.	0.90	0.37	0.41	0.45	0.74
Indianapolis (ZID)	Indianapolis Int'l Airport 1850 S. Sigsbee Street Indianapolis, IN 46241.	1.77	1.80	1.24	2.00	2.11
Jacksonville (ZJX)	811 E. Second Street P.O. Box 98 Hilliard, FL 32046.	1.15	1.44	1.40	1.19	1.09
Kansas City (ZKC)	250 S. Rogers Road Olathe, KS 66062-1689	1.84	1.01	0.87	1.22	1.19
Los Angeles (ZLA)	2555 East Avenue P Palmdale, CA 93550-2112	1.03	0.96	1.19	1.34	1.06
Memphis (ZME)	3229 Democrat Road Memphis, TN 38118	0.89	1.06	1.24	1.22	0.97
Miami (ZMA)	7500 N. W. 58th Street Miami, FL 33166	1.06	0.76	0.70	0.68	0.65
Minneapolis (ZMP)	512 Division Street Farmington, MN 55024	0.50	0.65	0.49	0.68	1.09
New York (ZNY)	4205 Johnson Avenue Ronkonkoma, NY 11779	1.91	2.06	1.87	1.84	1.68
Oakland (ZOA)	5125 Central Avenue Fremont, CA 94536-6531	0.70	1.28	1.08	0.74	1.30
Salt Lake (ZLC)	2150 West 700 North Salt Lake City, UT 84116	0.77	0.54	0.60	0.58	0.21
San Juan CERAP (ZUA)	DOT/FAA San Juan CERAP/GPO Section San Juan, PR 00936.	.....	0.78	.....	.....	.....

Facility	Location	Fiscal year				
		1995	1996	1997	1998	1999
Seattle (ZSE)	ARTCC Building 3101 Auburn Way S. Auburn, WA 98092.	1.12	0.65	0.21	0.36	0.42
Washington (ZDC)	825 East Market Street Leesburg, VA 20041	0.94	1.05	1.04	1.71	2.84

CONTROLLER TRAINING

Question. Please provide estimated obligations under the current controller training contract for each of the fiscal years 1996–2001.

Answer. The following is a breakdown of funding to support the air traffic controller training program.

[In thousands of dollars]

Activity	Fiscal year					
	1996	1997	1998	1999	2000 [1]	2001
Air Traffic Instructional Services Contract	9,572.2	11,920.0	13,893.5	15,494.7	16,700.0	16,700.0

[1] Includes the Administration's fiscal year 2000 Supplemental request.

CONTROLLER WORK FORCE

Question. Please provide a table consisting of the controller work force divided into total air traffic activity by year from fiscal year 1992–2001. Please comment on the trend in this controller productivity measure. Has the FAA developed any other metrics to measure controller productivity. Please provide a note estimating the number of controller staffing years that are incurred by virtue of backfill overtime.

Answer. The following table provides the information requested:

Year	ATCS	Total operations	Operations per ATCS
1992	15,147	143,590,432	9,480
1993	14,970	143,226,923	9,567
1994	14,953	145,871,002	9,755
1995	14,614	145,171,595	9,934
1996	14,360	141,457,797	9,851
1997	14,588	142,759,683	9,786
1998	14,966	145,456,514	9,719
1999	14,902	150,821,483	10,121
2000	15,000	152,105,300	10,140
2001	15,000	155,524,300	10,368

The FAA does not believe that a good set of productivity metrics exists today. The FAA and NATCA are working together to develop an accurate set of performance indicators for the air traffic control system, including productivity indicators. The FAA expects the report to be finished and delivered by the end of May 2000.

Note.—The estimated numbers of controller staffing years that are incurred by virtue of backfill overtime are:

Fiscal year	
1998	44
1999	126
2000	130

CONTROLLER PRODUCTIVITY

Question. What tools are anticipated to be available in the next fiscal year that will enhance controller productivity by virtue of increasing the number of operations handled by the average controller or by obviating the need for en route or other operations.

Answer. The following are tools that are anticipated to be available in the next fiscal year that will enhance controller productivity:

(1) Traffic Management Advisor (TMA), which provides the en route controller with more accurate time-based metering. TMA also allows for better, more effective coordination between the en route center and the approach control in determining airport acceptance rates.

(2) Passive Final Approach Spacing Tool (PFAST) provides a runway number and a sequence number to the terminal controller on the Automated Radar Terminal System (ARTS) data block. It will assist the controller in determining appropriate runway and sequence number to aircraft entering the terminal environment. PFAST alleviates some of the cognitive activity associated with manual determination of aircraft sequence.

(3) User Request Evaluation Tool, (URET) is the prototype for the Free Flight Phase 1 component, User Request Evaluation Tool Core Capability Limited Deployment (URET CCLD). URET provides alert notification of potential aircraft conflicts, enabling rapid analysis of and response to aircraft requests. It also supports the controller by providing electronic flight data management capabilities and supporting some reduction in verbal coordination activities. Prototyping activities will continue through fiscal year 2001, with delivery of the Free Flight component URET CCLD at the keysite Kansas City Air Route Traffic Control Center in September 2001.

DEPARTURE AND ARRIVAL PAIRS

Question. What are the average number of controller operations per departure and arrival pair by year from fiscal year 1992 through fiscal year 2001.

Answer. The FAA does not maintain data on "departure and arrival pairs." To develop a data base of that nature would be labor intensive. However, the Agency does maintain a statistic called total operations. It is made up of Instrument Flight Recorder aircraft handled in centers, terminal instrument operations, and airport tower operations. It does not include statistics from contract towers. Using this statistic and the addition of the number of center and terminal air traffic controllers (ATCS) database, the FAA has calculated the number of total operations per ATCS for the fiscal years 1992 through fiscal year 2001. The figures for fiscal year 2000 and fiscal year 2001 are estimates based on forecasts.

The following table provides the information requested.

Year	ATCS	Total operations	Operations per ATCS
1992	15,147	143,590,432	9,480
1994	14,953	145,871,002	9,755
1995	14,614	145,171,595	9,934
1996	14,360	141,457,797	9,851
1997	14,588	142,759,683	9,786
1998	14,966	145,456,514	9,719
1999	14,902	150,821,483	10,121
2000	15,000	152,105,300	10,140
2001	15,000	155,524,300	10,368

AIRPORT MOVEMENT AREA SAFETY SYSTEM (AMASS)

Question. Please provide the anticipated commissioning dates for the AMASS system deployments.

Answer. The following table reflects AMASS delivery dates and first and last operational readiness demonstration (ORD) dates. Following completion of the In-service review decision scheduled for 01/01, ORDs between San Francisco and Andrews Air Force Base will be in an order prioritized by Air Traffic and are expected to occur at a rate of approximately three every eight weeks. Commissionings are expected to occur, depending on site-specific requirements, two to three months after a site's ORD.

City	Delivery date	ORD date
Detroit	8/29/97	
St. Louis	1/16/98	

City	Delivery date	ORD date
FAA Technical Center	3/8/99	.....
San Francisco	6/15/99	6/01
FAA Academy	6/22/99	.....
Chicago	8/5/99	.....
Boston	8/16/99	.....
Los Angeles #1	8/25/99	.....
Los Angeles #2	9/2/99	.....
Salt Lake City	9/10/99	.....
Cleveland	9/16/99	.....
Seattle	10/8/99	.....
Newark	10/12/99	.....
Miami	11/2/99	.....
Minneapolis	11/5/99	.....
New York—Kennedy	12/10/99	.....
Cincinnati	1/10/00	.....
Kansas City	1/12/00	.....
Portland	1/19/00	.....
Pittsburgh	2/2/00	.....
Memphis	2/10/00	.....
Baltimore	3/6/00	.....
Philadelphia	3/6/00	.....
New Orleans	3/16/00	.....
Louisville	3/00	.....
Las Vegas	4/00	.....
Denver #1	4/00	.....
San Diego	4/00	.....
Dallas/Ft. Worth #1	5/00	.....
Dallas/Ft. Worth #2	5/00	.....
Anchorage	5/00	.....
Denver #2	5/00	.....
Charlotte	6/00	.....
New York—La Guardia	6/00	.....
Dulles	6/00	.....
La Guardia NY	6/00	.....
Houston #1	6/00	.....
Houston #2	7/00	.....
Reagan Washington National	[1] TBD	[1] TBD
Andrews AFB MD	1/01	9/02

[1] Due to multipath on runways, DCA did not commission its ASDE–3 9/99. To mitigate the mulitpath, the ASDE–3 antenna must be relocated. Funds have not yet been identified for this task. Commissioning date cannot be determined until funds have been allocated. This impacts the AMASS commissioning.

LEASED TELECOMMUNICATIONS

Question. Please provide the actual obligations for leased telecommunications for the past five fiscal years and the estimates for fiscal year 2000 and 2001.

Answer. The following represent the actual obligation for leased telecommunications for fiscal year 1995 to fiscal year1999 and the estimates for fiscal years 2000 and 2001:

[In thousands of dollars]

Fiscal year	
1995	312,477,400
1996	314,776,900
1997	314,981,600
1998	307,835,300
1999	273,332,200
2000	277,716,000
2001	355,819,000

IMPLEMENTATION OF OVERFLIGHT FEES

Question. Please reprint your reply to last year's question on the implementation of overflight fees (page 717 of the House hearing record) and respond to that question for the current budget cycle. In light of that response, what gives the FAA any confidence that the new user fees anticipated in the President's budget request will be realized as projected in the President's request, particularly in light of the deferral of work on the cost accounting system?

Excerpt from page 717 of last year's House hearings:

> "Mr. WOLF. What is your schedule for implementing the currently authorized overflight user fee, and what is your estimate of collections for fiscal year 2000?
>
> [The information follows:]
>
> Our schedule has been driven by the overall schedule for development of the Cost Accounting System. The necessary cost accounting data should be available within the next two months, and our goal is to have the overflight fees in effect by no later than October 1, 1999. We cannot give a precise estimate of collections at this point, pending availability of the cost accounting information upon which the fees will be based. We do know, however, that the fees and subsequent collections will be lower than those estimated under the previous rule."

Answer. With respect to the current budget cycle, we expect to publish a new overflight fee document in the Federal Register in the spring of 2000. The President's budget for fiscal year 2001 assumes collections of $5,100,000 in fiscal year 2000 and $22,100,000 in fiscal year 2001.

The deferral of certain work on the cost accounting system has no adverse effect on the FAA's ability to realize $965,000,000 in the new user fee revenues assumed in the President's budget. Those revenues would come from new cost-based fees for air traffic control services. The FAA already has good cost information of over $2,000,000,000 for en route and oceanic services, and would build upon this information to derive the new fees proposed in the President's budget.

OFFICE OF THE CHIEF COUNSEL

Question. Please provide detail as to how the increase requested for the Office of the Chief Counsel is to be used? What level of contract legal support is currently being utilized by the FAA?

Answer. The Office of the Chief Counsel will primarily use the increase to fund staff for support efforts in personnel and rulemaking matters. AIR 21 restored Merit System Protection Board (MSPB) and Office of Special Counsel (OSC) jurisdiction over personnel actions taken by FAA supervisors and managers. FAA employees are allowed to appeal adverse actions to MSPB. Actions appealable to the MSPB/OSC involve serious personnel actions.

The Safer Skies agenda goals and initiatives have identified safety interventions that will require additional advisory circulars, rules, guidance and policy letters. Each of these will require legal review. Backlogs in domestic Airworthiness Directives (AD's) and international AD's Mandatory Continued Airworthiness Instructions are continuing and can be expected to grow with the increased workload. Additional legal expertise in the regional counsel office will help keep backlogs to a minimum.

The FAA is not currently utilizing any contracted legal support; the existing legal staff consists of FAA employees.

NEW PROGRAMS REQUESTED IN FISCAL YEAR 2001

Question. Please provide a list, with corresponding fiscal year 2001 funding, of all new programs, projects, or activities in the fiscal year 2001 F&E budget request not requested in fiscal year 2000.

Answer. Listed below are the fiscal year 2001 programs not requested in fiscal year 2000.

Free Flight Phase 2	$50,000,000
Terminal Applied Engineering	6,700,000
Mode-S	1,974,000
Low Cost Airport Surface Detection Equipment	8,400,000
Weather Message Switching Center Replacement	2,500,000
ILS–Replace GRN–27	1,000,000
Gulf of Mexico Program	1,900,000
Distance Learning	2,200,000

NAS HANDOFF

Question. What level of NAS handoff funding was requested in Operations for fiscal year 2000 and what is currently anticipated to be funded out of the Operations account? How much NAS handoff funding is requested for fiscal year 2001 in Operations? In F&E?

Answer. The FAA's increase for NAS handoff in fiscal year 2000 was $85,500,000. The table, below, shows the disposition of the appropriated funds.

Approximately 81 percent of the funds appropriated for NAS Handoff had to be reprogrammed to cover operational shortfalls within the affected lines of business. The NAS Handoff costs were either funded by the F&E appropriation for another year, or were funded at greatly reduced levels within the operations base funding for existing NAS systems.

FISCAL YEAR 2000 PRESIDENT'S REQUEST—NAS HANDOFF

Budget activity	Fiscal year 2000 request	Congressional action	Appropriation	Reprogram	Net program
Regulation and Certification	$3,730,000	.....	$3,730,000	−$3,730,000	.....
Civil Aviation Security	1,800,000	−$713,000	1,087,000	−1,087,000	.....
Air Traffic Services	79,970,000	−15,050,000	64,920,000	−51,958,000	$12,962,000
Total FAA	85,500,000	−15,763,000	−69,737,000	−56,775,000	12,962,000

The fiscal year 2001 request for NAS handoff is $135,426,600, all in the Operations appropriation. The distribution by line of business is: $2,900,000 for Regulation and Certification; $3,388,000 for Civil Aviation Security; and $129,138,600 for Air Traffic Services.

PERCENTAGE OF F&E BUDGET REQUEST

Question. What percent of the F&E budget request for fiscal years 1999 through 2001 was for FAA salaries by year? What percentage for direct research, development, or procurement of items to sustain or modernize the NAS? What percentage is for overhead?

Answer. The percentages are listed below:

	Fiscal year		
	1999	2000	2001
Salaries	12	14	13
Direct research	1	1	1
Development	1	2	3
Procurement	86	83	83

Overhead charges do not apply to the F&E appropriation.

APPROVED COST AND SCHEDULE BASELINES

Question. Please provide a listing of each baselined F&E program providing a notation as to when the baseline was established and whether such baseline is either the first or second baseline for the program. In addition, please display the cost baseline, the schedule baseline, and the current status of the program against such baseline.

Answer. The baselined listing follows:

[Dollars in millions]

Program name baseline date	Total F&E cost baseline	Schedule baseline (last ORD)	Current Status
14 programs initiated after October 1996:			
Host and Oceanic Computer System Replacement (HOCSR) May 1998	$424.1	9/99 (Phase I)	Phase I completed.
FSAS Operational and Supportability System (OASIS) December 1996	Initial: 174.7 Re-baseline: 222.2 Re-baseline: 249.5	Initial: 8/01 Re-baseline: 9/02 Re-baseline: 5/05	Baseline under review.
Safety Performance and Analysis System (SPAS) August 1997	32.3	9/03	No change.
Free Flight Phase One April 1999	628.8	12/02	No change.
Controller Pilot Data Link Communications-Build 1/1A October 1998	159.9	12/05	No change.
Next Generation Air/Ground Communication System May 1998	407.6	9/08	The program is currently being restructured due to budget deferrals.
FAA Telecommunications Infrastructure July 1999	205.7	12/08	No change.
Systems Engineering and Technical Assistance Contract (SETA II) June 1999.			Contract to be awarded in June 2000.
Facility Security Risk Management February 1999	148.3	9/05	No change.
NAS Infrastructure Management System—Phase I March 1997	Initial: 100.8 Re-baseline: 60.3	9/00	The FAA re-baselined the program and has submitted a basis of determination to Congress.
ACQUIRE December 1996	5.6	9/98	Completed 12/98.
Local Area Augmentation System January 19998	Initial: 536.1 Re-baseline: 718.5	Initial: 12/06 Re-baseline: 10/11	Baseline under review.
Air Traffic Control Beacon Interrogator Replacement August 1997	282.9	9/04	Baseline under review.
NAS Implementation Support Contract October 1996	1337.0	9/07	No change.
30 programs initiated prior to October 1996:			
Display System Replacement May 1996	1,055.3	5/00	The program is reporting a $48.0M under-run to its cost baseline.
Common ARTS (ARTS IIA, ARTS IIIE) March 1997	86.1 (ARTS IIIE) 109.8 (ARTS IIE)	1/99 (ARTS IIIE) 4/00 (ARTS IIE)	The last ARTS IIIE ORD was completed in 6/99. The last ARTS IIE ORD is scheduled to be complete in 5/00.

Standard Terminal Automation Replacement System January 1996	1,076.1 (ceiling)	10/05 (ceiling)	A new cost/schedule baseline was presented to the Joint Resources Council in 10/99. The current estimate for the cost baseline is $1402.6M with a Last ORD of 9/08. The revised APB is under review and will be approved shortly. The primary reason for the increase is computer-human interface modifications to the system which require significant custom software development.
Oceanic—Build 1 July 1996	73.2	10/99	The Last ORD slipped to 6/00 due to New York Center priorities for deployment of DSR and HOCSR over MS–ODL.
Portable Performance Support System (PPSS) October 1998	45.7	9/04	No change.
Integrated Flight Quality Assurance (IFQA) October 1998	18.7	9/01	No change.
Voice Recorder Replacement Program January 1994	1,452.9	5/00	The program is reporting an underrun of $40.5M. The schedule reflects the Last ORD for VTABs.
Radio Control Equipment October 1998	260.4	12/01	The Last ORD has slipped to 6/02 due to budget deferrals.
Back up Emergency Communications Replacement October 1998	54.1	Initial: 4/04 Re-baseline: 2/09	Baseline under review.
Voice Recorder Replacement Program October 1998	29.4	5/02	The Last ORD has slipped to 6/04 due to budget deferrals.
Potomac TRACON July 1999	92.4	6/03	No change.
No. Cal TRACON October 1999	88.1	7/02	No change.
Atlanta TRACON October 1999	62.2	8/01	No change.
CAEG Replacement October 1999	18.5	4/02	No change.
Aeronautical Center-TSF/LSF April 1999	31.0	9/04	No change.
Wilcox Cat II/III ILS Replacement October 1998	14.3	12/99	Program Complete.
AN/GRN–27 ILS Replacement October 1998	87.6	12/99	The Last ORD has slipped to 12/01 due to budget deferrals.
Wide Area Augmentation System January 1998	Initial: 1,006.6 Re-baseline: 2,978.0	Initial: 12/01 Re-baseline: 12/06	Baseline under review.
Airport Surface Detection Equipment October 1998	249.1	11/99	The last ORD slipped to 2/02. The schedule slip is associated with the last site, Charlotte, which is a refurbished system awaiting spare parts.
Airport Movement Area Safety System (AMASS) October 1998	Initial: 74.1 Re-baseline: 151.8	Initial: 8/00 Re-baseline: 9/02	Baseline under review.
Mode S December 1999	467.1	10/04	No change.
Terminal Radar Program—ASR–9 October 1998	856.7	8/98	Completed 8/99.
Terminal Digital Radar—ASR–11 November 1997	743.3	9/05	Baseline under review.

[Dollars in millions]

Program name baseline date	Total F&E cost baseline	Schedule baseline (last ORD)	Current Status
Long Range Radar Program—ARSR–4 October 1998	415.8	6/99	Completed 3/00.
Aviation Surface Weather Observation Network (ASWON) October 1999.	350.9	4/02	No change.
Terminal Doppler Weather Radar October 1998	393.5	12/00	No change.
WARP Stage 0/1/2/3 October 1998	Initial: 125.6 Re-baseline: 143.6	Initial: 7/00 Re-baseline: 2/01	The FAA has re-baselined the program. The cost baseline increased $17.2M due to increased telecommunications infrastructure costs, additional time required to complete deployment of WARP Stage 1/2, and the need to continue providing WARP Stage 0 service to the field until Stage 1/2 deployment. The Last ORD slipped to 2/01.
Upgrade LLWAS to Expanded Network October 1998	43.5	10/01	The Last ORD has slipped to 3/02 due to the sub-contractor defaulting on the contract to produce and deliver radio transceivers for LLWAS sensors. The cost baseline increased $3.0M for contractor termination costs.
Integrated Terminal Weather System (ITWS)-Initial Operating Capability June 1997.	173.0	7/03	No change.
ASR Weather Systems Processor October 1998	80.4	9/02	The Last ORD slipped to 12/02 due to a 90-day extension in the contract start date as requested by Northrop-Grumman.

SCHEDULE FOR BASELINING REMAINING PROGRAMS

Question. Are all major acquisition programs baselined? Which programs remain unbaselined, and what is the schedule for completion of baselining those programs?

Answer. All major acquisition programs are either baselined, in process or identified to be baselined. There are currently 44 acquisition programs baselined, accounting for approximately 70 percent of the acquisition dollars in the agency's fiscal year 2001 F&E budget. The list below identifies those either in process or identified to be baselined.

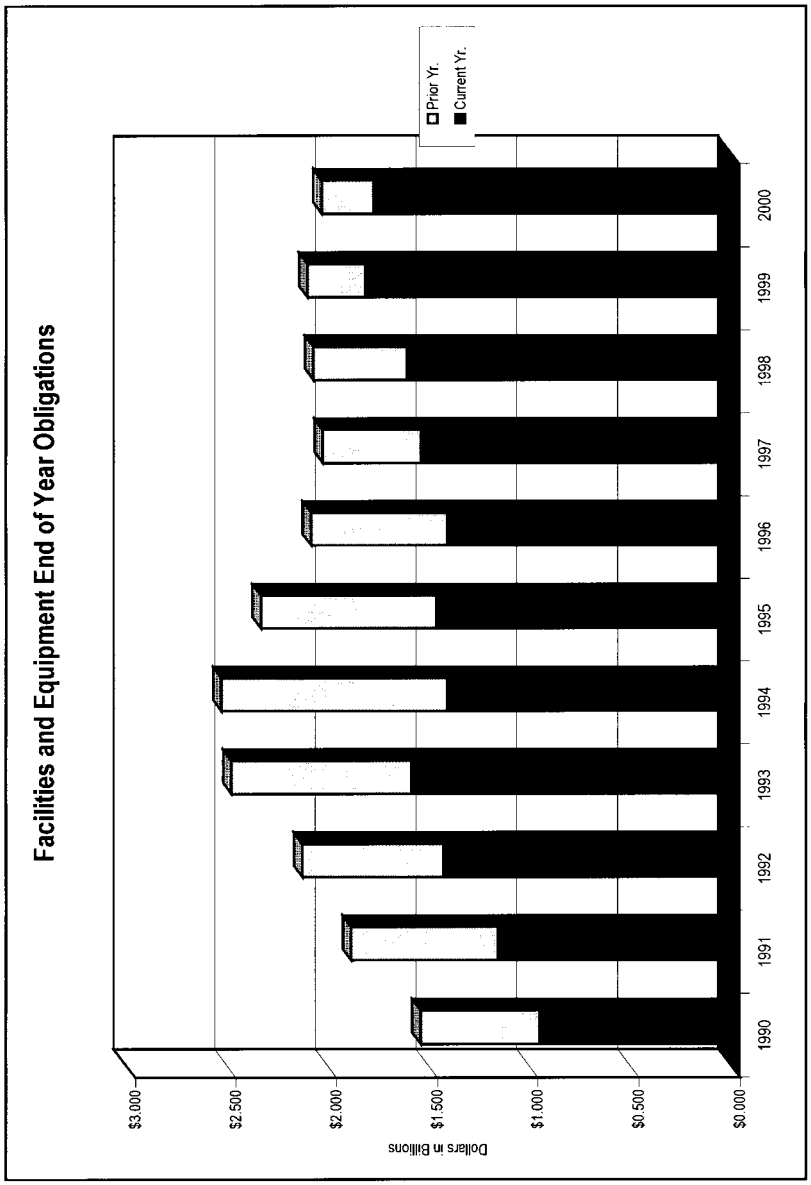
Program name	Planned completion date
En Route Communications Gateway (Eunomia)	September 2000.
AFSS Voice Switch Replacement	May 2000.
Aeronautical Data Link—CPDLC Build II	TBD.[1]
Power Systems	May 2000.
Information Security	TBD.[1]
Runway Incursion (in two phases)	August 2000.
ASDE–X Non-Radar	TBD.[1]
Oceanic—ATOP	TBD.[1]
Airport Cable Loop	May 2000.
Aeronautical Center—CAMI	TBD.[1]
NAS Training Modernization	September 2000.
Asset & Supply Chain Management	September 2000.
Long Range radar Improvements—Infrastructure Upgrades	TBD.[1]
NEXRAD Upgrades	TBD.[1]
TDWR Computer Replacement	TBD.[1]
Aviation Safety Analysis System	TBD.[1]
NAS Recovery Communications (RCOM)	September 2000.
Enhanced Terminal Voice Switch	September 2000.
A/G Communications	TBD.[1]
Alaskan NAS Interfacility Communications System Satellite Network-Phase II	August 2000.
Sustain Distance Measuring Equipment	TBD.[1]
NIMS—Phase II	May 2000.
Free Flight Phase II	TBD.[1]
En Route Domain Infrastructure (ERDI)	TBD.[1]
Advanced Airport Security Systems	TBD.[1]

[1] The baselines on TBD (to be determined) status are those programs in the process of having an investment analysis performed. Baselines are not established until an investment analysis of the alternatives is completed.

FACILITIES AND EQUIPMENT END OF YEAR OBLIGATIONS

Question. Please update the bar chart on page 783 of last year's House hearing record concerning end of year F&E obligations.

Answer. The bar chart follows:


Facilities and Equipment End of Year Obligations
Prior Yr.
Current Yr.
Dollars in Billions
$3.000
$2.500
$2.000
$1.500
$1.000
$0.500
$0.000
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000

FREE FLIGHT PHASE 1

Question. Please update the Free Flight Phase 1 (FFP1) baseline schedule on page 804 of last year's House hearing record.

Answer. The schedule follows.

FFP1 Baseline Schedule*

	TMA(SC)		TRACON		URET-CCLD		SBA WAAS		SWA	
	IDU	PCA	IDU	PCA	IDU	PCA	IDU	PCA	IDU	PCA
Chicago	TBD**	TBD**	TBD**	TBD**	2/02	8/02			12/99 (ORD)	12/99 (ORD)
Ft. Worth	4/00	4/00	4/00	4/00 (DFW)					12/99 (DFW)	12/99 (DFW)
Los Angeles	11/00	11/01	2/01	8/01 (LAX)						
Atlanta	2/01	2/02	3/01	9/01 (ATL)	2/02	8/02				
Indianapolis					12/01	8/02				
Memphis					11/01	8/02				
Washington					1/02	8/02				
Cleveland					1/02	8/02			12/98 (DTW)	12/98 (DTW)
Minneapolis	6/00	12/00	6/01	12/01 (MSP)						
Kansas City			10/01	4/02 (STL)	12/01	8/02				
New York									12/98 (PHL) 12/99 (EWR/ TEB)	12/98 (PHL) 12/99 (EWR/ TEB)
Oakland	9/01	8/02								
Miami	5/01	5/02								
Denver	9/00	3/01								
ATCSCC							9/99 GDPE 7/99 ICR 6/01 NASSI	9/99 GDPE 7/99 ICR 6/01 NASSI		

* *Implementation sites defined by RTCA, Addendum 1*

** *Begin development after completion of current airspace review and design*

WIDE AREA AUGMENTATION SYSTEM (WAAS)

Question. Please provide the names of the FAA WAAS team members working closely with Raytheon on resolving programmatic issues. Who is the accountable FAA official for cost and schedule baseline targets?

Answer. Key team members from FAA's Global Positioning System (GPS) Product Team who are working closely with Raytheon on resolving programmatic issues include the following:

—Jack Loewenstein, Integrated Product Team Leader (IPTL) for Navigation Systems
—Harry Kane, Deputy IPTL
—Steve Hodges, GPS Product Team Lead
—Hal Bell, Deputy GPS Product Team Lead
—Dan Hanlon, WAAS Program Manager
—Leo Eldredge, WAAS Phase 1 Project Manager
—Bill Wanner, Test and Evaluation Team Lead
—Tom McHugh, Deputy Test and Evaluation Team Lead
—Bruce DeCleene, Aircraft Certification
—Hank Cabler, Flight Standards, WAAS Program Sponsor
—Doug Davis, Airway Facilities, Communications, Navigation, Surveillance and Infrastructure
—Susan Eicher, GPS Product Team Contracting Officer
—Linda Lewis, GPS Product Team General Counsel

In addition to the above, numerous other FAA personnel and various technical experts from MITRE, NASA Jet Propulsion Laboratory, Ohio University, and Stanford University also provide extensive support to the WAAS project.

The FAA Acquisition Executive is the FAA official who is accountable for cost and schedule baseline targets. The FAA Acquisition Executive is Steve Zaidman, Associate Administrator for Research and Acquisitions.

SATELLITE NAVIGATION

Question. Please reprint your response to the satellite navigation questions on pages 807 and 808 of last year's House hearing record. Please, with hindsight, com-

ment on the current difficulties the FAA and Raytheon faces in the WAAS procurement and the studies findings?

Reprint of House hearing record p. 807—Satellite Navigation, question 1:

> "Mr. WOLF. The Johns Hopkins University recently completed its review of satellite navigation systems. While the Air Transport Association hailed the study's results, some outside observers have attacked the report on technical grounds. What are your views of the adequacy of this study?
>
> [The information follows:]
>
> Johns Hopkins University Applied Physics Laboratory did an excellent job given the time and resources that were available to them. The FAA is pleased with the study's findings that sole-means and sole-service are technically achievable, and that the risks to attaining those goals are manageable. The report also identifies those areas where additional work is necessary, such as the definition of the intentional interference threat and a reassessment of the most cost-efficient satellite navigation architecture. These findings are not interpreted to mean that implementing of satellite navigation will be easy, but rather to indicate where risk mitigation efforts should be directed. The FAA is also considering the criticisms of the report in determining future satellite navigation policy."

Answer. The Johns Hopkins University Applied Physics Laboratory study identified interference and ionospheric propagation and scintillation as areas of risk. The FAA has focused risk mitigation efforts in these same areas as identified in the report. The FAA has done a considerable amount of work in the mitigation of interference and also has a variety of initiatives that focus on ionospheric issues. As the report predicted, ionospheric issues have been challenging. The FAA is addressing these issues with academia and various international partners who face these same challenges.

Reprint of House hearing record p. 807—Satellite Navigation, question 2:

> "Mr. WOLF. Does this provide sufficient evidence for the FAA to move ahead beyond phase one of WAAS?
>
> [The information follows:]
>
> We are encouraged by the Johns Hopkins risk assessment and remain committed to delivering sole-means global navigation satellite systems. The determination that "sole-means" and "sole-service" capabilities are feasible is an incentive to finding an affordable end-state wherein risk is managed effectively. The required levels of performance will not be provided in Phase One. We are developing an action plan to address all of the issues and recommendations that have been raised by the study, and are preparing a Satellite Navigation Investment Analysis to determine the most cost-effective means of providing sole-means and/or sole-service capabilities."

Answer. The Satellite Navigation Investment Analysis was completed in September 1999. The findings were provided to Congress in November 1999. As a result of the investment analysis, satellite navigation, despite its challenges, is still considered to be the most cost-effective means sole and sole source capabilities. A combined WAAS/LAAS approach, with a basic backup network of ground based NAVAIDS, was shown to be the most cost-effective.

Reprint of House hearing record p. 808—Satellite Navigation, question 3:

> "Mr. WOLF. The Johns Hopkins study discusses a number of operational and technical risks in achieving the potential of GPS. Isn't it one thing to say that something is "technically possible", and quite another to say it is cost-effective?
>
> [The information follows:]
>
> Yes. The Johns Hopkins study was conducted to answer the "technically possible" question. Another study, the FAA's ongoing Satellite Navigation Investment Analysis, is intended to determine its cost-effectiveness, particularly in comparison to other navigation alternatives. That study is expected to be completed in June 1999."

Answer. The Satellite Navigation Investment Analysis was completed in September 1999. The findings were provided to Congress in November 1999. One alternative retained all Very High Frequency Omnidirectional Radio Range/Distance Measuring Equipment/Instrument Landing System in lieu of augmented satellite navigation Wide Area Augmentation System/Local Area Augmentation System (WAAS and LAAS). The study reaffirmed satellite navigation as the most cost-beneficial navigation concept for the future with a benefit to cost ratio 2.4 for the WAAS/LAAS alternative.

Additionally, the FAA has been working closely with aviation user groups to ensure that navigation solutions developed and implemented by the FAA will be in line with the needs of the user community. Aviation user groups have validated their support of the FAA's commitment to satellite navigation. These groups have enthusiastically cited examples of both current and potential benefits enabled by GPS and its augmentations (WAAS/LAAS). These benefits include the provision of navigation capability to areas where it currently did not exist, increased safety through improved position-awareness, and increased cost-effectiveness of operations due to the unique flexibility enabled by satellite navigation.

Question. Please describe the FAA's anticipated strategy to address the integrity issue as it relates to WAAS. Were any of the academic experts working on this proposed solution involved in the John Hopkins study? If so, which ones?

Answer. The FAA's approach for addressing the WAAS integrity issue is two-fold. The FAA has developed a WAAS Integrity and Performance Panel (WIPP) comprised of leading experts in the satellite navigation field—including representatives from MITRE, NASA's Jet Propulsion Laboratory, Stanford University, Ohio University, Zeta, Raytheon Corporation, and the FAA. The objectives of this panel will include the identification of technical solutions and evaluation of future concepts for the WAAS in the areas of algorithm and architecture, with the emphasis of achieving integrity while balancing acceptable levels of accuracy and availability performance. Additionally, a WAAS Independent Review Board, consisting of a separate panel of technical and operational aviation experts, will be formed to review the overall approach and specific technical deliverables produced by the WIPP. The charter and membership for these two groups is currently being developed.

None of the technical experts involved in the current WIPP effort was directly involved in the Johns Hopkins University/Applied Physics Laboratory GPS Risk Assessment Study, except to provide information as requested by the university.

Question. Considering the certification difficulties involved with WAAS that need to be resolved, and the recognition that the LAAS uses similar GPS technology as its basis, please describe the FAA's anticipated strategy to address the integrity issue as it relates to LAAS. Will the same issue effect the LAAS certification process and how does the FAA plan on avoiding repeating the WAAS history in the LAAS program?

Answer. In 1995, LAAS was developed as a demonstration and validation program. Operation requirements and approval to establish LAAS standards were completed by February 1996. LAAS has used FAA's other transaction authority to focus industry on development and certification of ground and air segments, both beginning with development of CAT I LAAS and then CAT II/III LAAS. The FAA has obtained experience on the Special Category I (SCAT–I) systems, privately developed local area augmentation systems. Recognizing from the start that integrity is a key issue, the FAA created the LAAS Integrity Panel (LIP) to address each SCAT–I vendor's approach to integrity. This panel has continued to monitor the LAAS Government Industry Partnerships (GIP) that were established in April 1999 and has even spawned a similar panel with the WAAS procurement. The experience gained by the LIP will continue to be applied to the LAAS development through CAT III. That is, the FAA will apply its most knowledgeable experts to the LAAS CAT III integrity problem, just as it has for SCAT–I and LAAS CAT I.

The FAA is aware of the integrity challenge presented by LAAS and is aggressively addressing this issue. The LAAS team is considering integrity a key requirement at the start. Further, the LAAS team is continually applying the experience gained on SCAT–I and will eventually apply experience gained with LAAS CAT I. These factors minimize the LAAS integrity risk.

Question. What are the future spending needs of the WAAS and LAAS? Over what time frame will those funds be needed?

Answer. At this time, FAA's most accurate estimate is the December 1999 FAA Satellite Navigation Program Baselines. The future WAAS program needs shall be determined once the Agency has the technical solutions for the system integrity problem, which are expected in December 2000.

RUNWAY INCURSIONS

Question. Does the Automatic Dependent Surveillance-Broadcast (ADS–B) program have a role to play in addressing the runway incursion issue?

Answer. Yes. ADS–B will be able to contribute two critical components to the runway incursion issue. The first component would provide ADS–B target information to the controllers. This capability would be similar to radar based Airport Surface Detection Equipment (ASDE) display functionality in the tower cab, but would pro-

vide controllers with more accurate target information, such as aircraft data tag and precise GPS derived position.

The second component is ADS–B driven cockpit surface moving map displays. Safe Flight-21 is currently developing commercial cockpit displays, which provide pilots critical information such as their precise position on the airport surface relative to other aircraft occupying runways or about to land. This tool should be very effective in reducing the number of pilot and vehicle deviations, by providing pilots and ground vehicles the same "situational awareness" picture afforded only to tower controllers today. More importantly, since ADS–B works between equipped aircraft pairs, cockpit moving map displays would offer a level of safety at airports that currently don't have ASDE equipment.

TOWER REPLACEMENTS

Question. Please update the data on tower replacements found on pages 820–838 of last year's House hearing record.

Answer. The following table provides the information requested:

Tower Replacements—Funding and Construction Status

Fiscal year 1989:
- Windsor Locks, CT:
  - Fiscal year:
    - 1997 ..... $9,393,000
    - 1999 1,596,000
  - Status: Commissioned September 19, 1999.
- Fort Smith, AR:
  - Fiscal year:
    - 1997 1,295,000
    - 1998 2,310,000
    - 1999 35,000
  - Status: Commissioned September 17, 1999.

Fiscal year 1990:
- St. Louis, MO (ATCT):
  - Fiscal year
    - 1997 1,130,000
    - 1998 760,000
    - 1999 1,900,000
    - 2000 1,600,000
  - Status: Commissioned May 15, 1999.
- La Guardia, NY:
  - Fiscal year:
    - 2000 2,200,000
    - 2001 25,440,000
  - Status: Site adaptation engineering underway.
  - Schedule: Construction award January 2001. Commissioning June 2003.
  - Remarks: Site selection and approval on this congested airport required an unusually long time. Fiscal year 1999 funding decreased by Congress from $23,960,000 to 13,960,000. $13,960,000 reprogrammed to accommodate Congressional adds and other construction.
- Newark, NJ:
  - Fiscal year:
    - 1998 24,348,000
    - 2000 2,200,000
    - 2001 2,407,500
  - Status: Construction award September 1999.
  - Schedule: Commissioning November 2002.
  - Remarks: Site selection and approval on this congested airport required an unusually long time.

Fiscal year 1991:
- Syracuse, NY:
  - Fiscal year:
    - 1997 25,000
    - 1998 2,400,000

Tower Replacements—Funding and Construction Status—Continued

1999	941,000
Status: Commissioned December 12, 1999.	
Houston Hobby, TX:	
Fiscal year:	
1997	25,000
1998	1,100,000
1999	1,015,000
2000	400,000
2001	818,550
Status: Electronic installation underway.	
Schedule: Commissioning June 2000.	
Beaumont, TX: Fiscal year 1998	820,000
Status: Site has been selected. Engineering that was on hold per Congressional direction, is underway.	
Schedule: Construction award November 2000. Commissioning March 2003.	
Fiscal year 1992:	
Portland, OR:	
Fiscal year:	
1997	7,526,000
1998	2,130,000
1999	596,000
2000	50,000
Status: Commissioned December 5, 1999.	
Stewart (Newburgh), NY:	
Fiscal year:	
1992	3,000,000
1993 (Fiscal year 1993 funding under ATCT Establish)	1,700,000
2001	500,000
Status: Alternate site has been selected.	
Schedule: Construction award October 2001. Commissioning September 2004.	
Fiscal year 1993:	
Topeka, KS:	
Fiscal year:	
1999	700,000
2001	4,361,840
Status: Engineering is complete.	
Schedule: Construction award October 2000. Commissioning November 2003.	
St. Paul, MN:	
Fiscal year:	
1997	115,000
1998	110,000
1999	298,000
Status: Commissioned November 6, 1999.	
Salt Lake City, UT (ATCT):	
Fiscal year:	
1997	2,289,000
1998	1,370,000
1999	727,000
Status: Commissioned June 26, 1999.	
Little Rock, AR:	
Fiscal year:	
1999	1,076,000
2000	740,000
2001	642,000
Status: Electronic installation underway.	
Schedule: Commissioning September 2000.	
Islip, NY:	
Fiscal year:	
1997	367,000

Tower Replacements—Funding and Construction Status—Continued

1999	50,000
Additional Cost to Complete	5,714,500

Status: Architect/engineers proposal for site adaptation design submitted and approved, and on hold.
Schedule: Construction award October 2002. Commissioning September 2005.

Dallas Addison, TX:

Fiscal year:	
1997	640,000
1999	700,000

Schedule: Construction award October 2001. Commissioning September 2004.

Fiscal year 1995:

Merrill, AK:

Fiscal year:	
1997	5,202,000
1998	150,000
1999	130,000
2001	321,000

Status: Commissioned November 2, 1999.
Remarks: Fiscal year 2001 funds are for old tower demolition.

Salina, KS:

Fiscal year:	
1997	184,000
2001	267,500
Additional Cost to complete	4,675,777

Status: Engineering is underway.
Schedule: Construction award November 2000. Commissioning July 2003.

Newport News, VA:

Fiscal year:	
1997	74,000
1999	400,000
Additional Cost to complete	5,950,000

Status: Site selection is complete.
Schedule: Construction award October 2001. Commissioning September 2004.

Roanoke, VA:

Fiscal year:	
1997	578,000
1999	100,000
2000	4,900,000
2001	2,140,000

Status: Engineering is underway.
Schedule: Construction award August 2000. Commissioning September 2002.

Columbus, OH:

Fiscal year:	
1999	750,000
2000	17,600,000
2001	1,000,000

Status: Engineering is underway.
Schedule: Construction Award October 2000. Commissioning April 2004.
Remarks: Fiscal year 1999 funding increased by Congress from $50,000 to $750,000.

Manchester, NH:

Fiscal year:	
1997	937,500
1999	80,000
Additional Cost to complete	3,565,700

Tower Replacements—Funding and Construction Status—Continued

Status: Site has been selected. Engineering is underway.
Schedule: Construction award October 2001. Commissioning November 2004.

Everett, WA:
Fiscal year 1999 1,050,000
Additional Cost to complete 5,541,655
Status: Engineering is underway.
Schedule: Construction will be in two phases. Phase I (foundation) Construction award March 2000. Phase II Construction award October 2002. Commissioning September 2005.
Remarks: Fiscal year 1999 funding increased by Congress from $50,000 to $1,050,000.

Ft. Lauderdale Executive FL:
Fiscal year 1999 50,000
Additional Cost to complete 3,084,200
Status: Engineering is underway.
Schedule: Construction award October 2002. Commissioning September 2005.

Oakland, CA:
Fiscal year:
1999 50,000
2001 25,912,347
Status: Engineering is underway.
Schedule: Construction award January 2001. Commissioning August 2004.

Birmingham, AL:
Fiscal year:
1998 10,130,000
1999 550,000
2000 1,250,000
2001 1,359,540
Status: Under construction.
Schedule: Commissioning January 2001.

Salt Lake City, UT (TRACON):
Fiscal year:
1998 1,320,000
1999 50,000
Status: Commissioned June 26, 1999.

St. Louis, MO (TRACON):
Fiscal year:
1998 11,630,000
1999 1,050,000
2000 3,800,000
2001 3,317,000
Additional Cost to complete ..... TBD
Status: Under construction.
Schedule: Commissioning February 2002.

Fiscal year 1996:
Corpus Christi, TX: Fiscal year 2000 (Fiscal year 2000 funds added by Congress) 1,500,000
Status: Under construction.
Schedule: Commissioning March 2003.
Remarks: Construction funded with fiscal year 2000 funds that could not be obligated on the Boston TRACON.

Seattle (TRACON), WA:
Fiscal year 1999 50,000
Additional Cost to complete 24,577,263

Tower Replacements—Funding and Construction Status—Continued

Status: Site selection is underway.
Schedule: Construction Award October 2001. Commissioning September 2004.

Champaign, IL:
Fiscal year:
1997 1,287,000
2001 749,000
Additional Cost to complete 2,683,072
Status: Site has been selected. Engineering is underway.
Schedule: Construction award October 2001. Commissioning September 2004.

Grand Canyon, AZ:
Fiscal year:
1999 8,170,000
2000 243,000
2001 267,500
Status: Engineering is complete.
Schedule: Construction award January 2001. Commissioning April 2003.

Vero Beach, FL: Additional Cost to complete 5,507,870
Status: Engineering underway.
Schedule: Construction award October 2001. Commissioning September 2004.

Bedford, MA:
Fiscal year:
1999 4,800,000
2001 535,000
Status: Construction contract awarded January 26, 2000.
Schedule: Commissioning January 2003.

Fiscal year 1997:
Abilene, TX:
Fiscal year:
1997 693,000
1998 1,010,000
Additional Cost to complete 12,990,000
Status: Site selection underway.
Schedule: Construction award October 2002. Commissioning September 2005.

East St. Louis, IL:
Fiscal year:
1997 25,000
1998 500,000
Additional Cost to complete 3,469,000
Status: Site selection underway.
Schedule: Construction award October 2002. Commissioning September 2005.

Seattle (ATCT), WA:
Fiscal year:
1997 645,000
1998 580,000
1999 19,770,000
2000 10,270,000
2001 25,000
Status: Construction Contract awarded January 11, 2000.
Schedule: Commissioning June 2003.

Richmond, VA:
Fiscal year:
1997 525,000
1998 1,350,000
2000 (Fiscal year 2000 funds added by Congress) 3,000,000
Additional Cost to complete 6,002,100

Tower Replacements—Funding and Construction Status—Continued

Status: Site selection under review. The airport sponsor has proposed construction of the tower under a leaseback agreement.
Schedule: Construction award October 2001. Commissioning September 2004.

Savannah, GA:
Fiscal year:

1997	288,000
1998	680,000
2001	7,741,015

Status: Engineering underway.
Schedule: Construction award January 2001. Commissioning March 2004.

Boston (TRACON), MA:
Fiscal year:

1997	1,110,000
1998	1,880,000
1999	1,870,000
2000	10,000,000
2001	24,944,308

Status: Site has been purchased. Design is complete.
Schedule: Construction award January 2001. Commissioning November 2003.
Remarks: Fiscal year 2000 funding reduced by Congress.

Fiscal year 1998:
N. Las Vegas, NV:
Fiscal year:

1998	5,700,000
1999	1,200,000
2000	2,354,000
2001	214,000

Status: Engineering is underway.
Schedule: Construction award March 2000. Commissioning October 2001.
Remarks: Fiscal year 1999 funding increased by Congress from $200,000 to $1,200,00.

Medford, OR:

Fiscal year 1998	600,000
Additional Cost to complete	8,565,708

Status: On hold.
Schedule: Construction award October 2002. Commissioning September 2005.

Swanton (Toledo), OH:
Fiscal year:

1998	700,000
2000	700,000
Additional Cost to complete	8,386,873

Status: Site selection is complete. Construction will be accomplished by sponsor.
Schedule: Dependent on sponsor.

Fiscal year 1999
Asheville, NC:

Fiscal year 1999	298,000
Additional Cost to complete	7,214,550

Status: On hold due to anticipated long lead-time for construction funds.
Schedule: Construction award October 2002. Commissioning April 2005.

Tulsa Riverside, OK:

Fiscal year 1999	298,000
Additional Cost to complete	7,525,470

Tower Replacements—Funding and Construction Status—Continued

Status: On hold due to anticipated long lead-time for construction funds.
Schedule: Construction award October 2002. Commissioning June 2005.

Reno, NV:
Fiscal year 1999 297,000
Additional Cost to complete 8,636,360
Status: On hold due to anticipated long lead time for construction funds.
Schedule: Construction award October 2002. Commissioning September 2005.

Billings, MT:
Fiscal year:
1999 1,000,000
2000 (Fiscal year 1999 and fiscal year 2000 funds added by Congress) 1,000,000
Additional Cost to complete 11,000,000
Status: Site selection is complete.
Schedule: Construction award October 2003. Commissioning July 2006.

Fiscal year 2000:
Atlanta International, GA:
Fiscal year:
2000 1,800,000
2001 167,900
Status: Construction to be accomplished by and funded by airport sponsor. FAA funding is for equipment procurement.

Phoenix, AZ: Fiscal year 2000 (Fiscal year 2000 funds added by Congress) 4,000,000
Status: Site selection is underway.
Schedule: TBD

Fiscal year 2001 (Proposed):
Chantilly (Dulles), VA: Fiscal year 2001 75,000
Broomfield, CO: Fiscal year 2001 75,000
Phoenix (Deer Valley), AZ: Fiscal year 2001 75,000
Gulfport, MS: Fiscal year 2001 75,000
Kalamazoo, MI: Fiscal year 2001 75,000

STANDARD TERMINAL AUTOMATION REPLACEMENT SYSTEM (STARS)

Question. Please provide a breakdown of the F&E funding requested for STARS in the fiscal year 2001 request with appropriate funding for fiscal year 2000 broken down in the same manner.

Answer. The breakdown of STARS F&E funding for fiscal years 2000 and 2001 follows.

[In millions of dollars]

Activity	Fiscal year	
	2000	2001
Product development/Test	87.9	80.9
Production	7.9	21.6
Implementation	6.8	16.4
NAILS/Maintenance	6.5	14.8
HQ Technical Assistance	20.0	14.1
ANS Facility Upgrade	0.8	2.8
OGC/GFE	21.3	16.4
ACDs/ARTS IIIE	37.8	11.8
IOT&E	.....	0.5
Total	188.9	179.2

Question. Provide an updated waterfall schedule for delivery of STARS systems for fiscal years 2000, 2001, 2002, and 2003.

Answer. A STARS Site Deployment Working Group has recently been formed to provide an updated waterfall schedule for delivery of STARS systems through 2008. This updated waterfall will be available the end of fiscal year 2000.

INSTRUMENT LANDING SYSTEM (ILS)

Question. Please provide the updated ILS survey and analysis of existing and future needs. Please provide the current list of the locations for which the FAA has identified current of future ILS requirements.

Answer. In September 1998, the FAA conducted a cursory benefit cost analyses (BCA) of all potential precision approach locations in the NAS. The results of this study which was based on Airport Planning Standards Number One (APS–1) criteria, identified approximately 100 airport locations that yielded a positive BCA and were potential candidates for precision approach services. The resultant listing follows.

No.	State	Airport	Region	RWY	Type
1.	FL	Jacksonville Int'l (JAX)	ASO	31	CAT I
2.	NC	Charlotte Douglas Int'l (CLT)	ASO	18W	CAT III
3.	NC	Charlotte Douglas Int'l (CLT)	ASO	36W	CAT III
4.	CA	Sacramento Int'l (SMF)	AWP	34R	CAT I
5.	CA	Fresno (FAT)	AWP	29R	CAT 2/3
6.	NY	New York (JFK)	AEA	22R	CAT 2/3
7.	FL	Orlando-Sanford (SFB)	ASO	27R	CAT I
8.	NC	Charlotte-Douglas Int'l (CLT)	ASO	18R	CAT III
9.	NY	New York (JFK)	AEA	13R	CAT I
10.	NY	New York (LGA)	AEA	22	CAT 2/3
11.	NY	New York (LGA)	AEA	13	CAT 2/3
12.	NV	Las Vegas-Mccarran Int. (LAS)	AWP	01R	CAT I
13.	WA	Seattle-Sea-Tac (SEA)	ANM	16L	CAT III
14.	WA	Seattle-Sea-Tac (SEA)	ANM	16W	CAT III
15.	FL	Daytona Beach Reg. (DAB)	ASO	25R	CAT I
16.	FL	Orlando Int'l (MCO)	ASO	18R	CAT III
17.	NV	Elko Muni-J.C. Harris Field (EKO)	AWP	23	CAT I
18.	CA	Palm Springs Regional (PSP)	AWP	31L	CAT I
19.	FL	Orlando-Executive (ORL)	ASO	25	CAT I
20.	WI	Milwaukee (MKE)	AGL	25R	CAT I
21.	TX	Houston (KHOU)	ASW	22	CAT I
22.	NY	Buffalo (BUF)	AEA	14	CAT I
23.	MN	Duluth (DLH)	AGL	9	CAT II
24.	VA	Norfolk (ORF)	AEA	5	CAT 2/3
25.	GA	Atlanta-Hartsfield Int'l (ATL)	ASO	28	CAT II
26.	GA	Atlanta-Hartsfield Int'l (ATL)	ASO	10	CAT II
27.	CA	Metropolitan Oakland Int'l (OAK)	AWP	27L	CAT I
28.	NJ	Newark (EWR)	AEA	22L	CAT 2/3
29.	FL	Miami Int'l (MIA)	ASO	9R	CAT III
30.	FL	Panama City-Bay Co. (PFN)	ASO	32	CAT I
31.	MO	Springfield-Branson Regional (SGF)	ACE	2	CAT II
32.	FL	Kendall-Tamiami Exec. (TMB)	ASO	27L	CAT I
33.	LA	Baton Rouge (KBTR)	ASW	31	CAT I
34.	PA	Philadelphia (PHL)	AEA	27R	CAT 2/3
35.	NJ	Atlantic City (ACY)	AEA	31	CAT I
36.	PA	Allentown (ABE)	AEA	24	CAT I
37.	AK	Anchorage (ANC)	AAL	6L	CAT I
38.	FL	Kissimmee Mun. (ISM)	ASO	33	CAT I
39.	KY	CVG./North KY Int'l. (CVG)	ASO	27	CAT 2/3
40.	CA	Buchanan Field (CCR)	AWP	19R	CAT I
41.	GA	Savannah Int'l (SAV)	ASO	27	CAT I
42.	OK	Oklahoma City (KOKC)	ASW	35L	CAT I
43.	MI	Traverse City (TVC)	AGL	36	CAT I

No.	State	Airport	Region	RWY	Type
44.	WA ..	Seattle-Sea-Tac (SEA)	ANM	34W	CAT I
45.	WA ..	Seattle-Sea-Tac (SEA)	ANM	16R	CAT I
46.	FL	Tampa Int'l (TPA)	ASO	36R	CAT I
47.	TN ...	Knoxville (TYS)	ASO	23L	CAT I
48.	TN ...	McGhee Tyson (TYS)	ASO	05R	CAT I
49.	VA ...	Chantilly (IAD)	AEA	19R	CAT 2/3
50.	FL	Orlando Int'l (MCO)	ASO	18L	CAT I
51.	FL	Orlando Int'l (MCO)	ASO	35R	CAT1
52.	AR ...	Fort Smith (KFSM)	ASW	7	CAT I
53.	MD ..	Baltimore (BWI)	AEA	15R	CAT 2/3
54.	MI ...	Flint (FNT)	AGL	36	CAT I
55.	CA ...	Palmdale (PMD)	AWP	4	CAT I
56.	UT ...	Salt Lake City (SLC)	ANM	34L	CAT III
57.	KY ...	Bowman Field (LOU)	ASO	24	CAT I
58.	TX ...	Midland (KMAF)	ASW	34L	CAT I
59.	NV ...	North Las Vegas (VGT)	AWP	12	CAT I
60.	NC ...	Raleigh-Durham Int'l (RDU)	ASO	23L	CAT 2/3
61.	FL	Tampa Int'l (TPA)	ASO	18L	CAT III
62.	DC ...	National (DCA)	AEA	33	CAT I
63.	TX ...	Abilene (KABI)	ASW	17R	CAT I
64.	DE ...	Wilmington (ILG)	AEA	19	CAT I
65.	HI	Honolulu Int'l (HNL)	AWP	08R	CAT I
66.	TN ...	Nashville, JOHN C. TUNE (JWN)	ASO	19	CAT I
67.	AZ ...	Mesa—Falcon Field (FFZ)	AWP	04R	CAT I
68.	HI	Kahului (OGG)	AWP	20	CAT I
69.	FL	Tampa Int'l (TPA)	ASO	17	CAT I
70.	AL ...	Birmingham Mun. (BHM)	ASO	5	CAT I
71.	FL	Tampa Int'l (TPA)	ASO	35	CAT III
72.	GA ...	Valdosta Reg. (VLD)	ASO	17	CAT I
73.	NC ...	Greensboro/Piedmont Int'l (GSO)	ASO	5N	CAT 2/3
74.	MA ..	Martha's Vineyard (MVY)	ANE	6	CAT I
75.	FL	Southwest Fla. Reg. (RSW)	ASO	06R	CAT I
76,	FL	Southwest Fla. Reg. (RSW)	ASO	24L	CAT I
77.	FL	Southwest Fla. Reg. (RSW)	ASO	24	CAT I
78.	KS ...	Hays Muni (HYS)	ACE	34	CAT I
79.	IA	Cedar Rapids/The Eastern Iowa (CID)	ACE	9	CAT II
80.	FL	TAMPA, Vandenberg (X16)	ASO	22	CAT I
81.	IA	Dubuque Regional (DBQ)	ACE	36	CAT I
82.	FL	Tallahassee (TLH)	ASO	18	CAT I
83.	FL	Tallahasee Reg. (TLH)	ASO	9	CAT I
84.	AZ ...	Laughlin-Bullhead Int'l (IFP)	AWP	34	CAT I
85.	NJ	Wildwood (WWD)	AEA	19	CAT I
86.	MI ...	Grand Radips (GRR)	AGL	23R	CAT I
87.	OH ...	Columbus (CMH)	AGL	10S	CAT I
88.	CA ...	Hayward Air Terminal (HWD)	AWP	28L	CAT I
89.	MN ..	Minneapolis (MSP)	AGL	17	CAT I
90.	NY ...	Syracuse (SYR)	AEA	32	CAT I
91.	CA ...	Napa County (APC)	AWP	36L	CAT I
92.	FL	Pensacola Regional (PNS)	ASO	35	CAT I
93.	IA	Des Monies Int'l (DSM)	ACE	5	CAT I
94.	PA ...	Philadelphia (PHL)	AEA	25	CAT I
95.	PA ...	Philadelphia (PHL)	AEA	35	CAT I
96.	MI ...	Detroit (DTW)	AGL	4	CAT III
97.	MS ..	Olive Branch (OLV)	ASO	18	CAT I
98.	CA ...	Long Beach-Daugherty Field (LGB)	AWP	25R	CAT I
99.	CT ...	Windsor Locks (BDL)	ANE	15	CAT I
100.	NC ...	Greensboro/Piedmont Int'l (GSO)	ASO	23N	CAT I

NAS HANDOFF FOR SATELLITE–RELATED INSTRASTRUCTURE

Question. What operation and maintenance costs are anticipated in fiscal year 2001 for NAS handoff requirements relating to operation and maintenance of the satellite-related infrastructure, pursuant to the eventual transition to a satellite-based navigational system?

Answer. The fiscal year 2001 NAS handoff requirement is $10,000. This money will be used to fund one month (September 2001) of interim contractor depot logistics support.

FEDERAL FUNDED RESEACH AND DEVELOPMENT CENTER COMPREHENSIVE REVIEW

Question. Please provide a copy of the November 30, 1999 comprehensive review of the Federally Funded Research and Development Center (FFRDC), Center for Advanced Aviation System Development (CAASD) that the FAA indicated would be complete in a response to the question for the record last year.

Answer. A copy of the Comprehensive Review of the FFRDC for Advanced Aviation System Development follows.

[CLERKS NOTE.—Because of its volume the Comprehensive Review will not be printed here but retained in the subcommittee files.]

WIDE AREA AUGMENTATION SYSTEM

Question. The FAA's SatNav Investment Analysis and Report completed late last year, said (page 86) "* * *. The airlines support WAAS and LAAS * * *. However, they are much less enthusiastic about WAAS than LAAS, because in aircraft equipped with FMS, WAAS will not provide substantial added economic or operational value to them beyond what unaided GPS can provide, or beyond what they can achieve with RNAV–capable FMS equipment * * *." If that's true wouldn't you agree it would seem to make sense that we not continue to spend money on this ever increasing and very expensive program?

Answer. WAAS is very beneficial for the entire aviation population. The WAAS system will allow GPS to be used as a navigation system for en route, non-precision approaches, and precision approaches in the United States. Indeed, all airlines support the development of WAAS because it will increase the capacity of major airports in the United States, by allowing smaller aircraft to land at more airports by expanding precision approach capability to smaller airports.

Question. That same analysis indicates that only with some very generous assumptions, the benefit/cost (B/C) ratio for this program appears to be barely better than 1.0. There must be other FAA programs that promise better benefits and more prudent use of available resources. What FAA programs have better B/C ratios than is currently contemplated for the WAAS program that are not being funded adequately or given the funding priority that the WAAS initiative is being given?

Answer. The latest acquisition program baseline for WAAS, signed in December 1999, shows a B/C ratio of approximately 2.4 calculated with Passenger Value of Time (PVT), per DOT policy, and a net present value of $2,400,000,000. While these ratios are generally estimated as part of the investment analysis, they are not the final determining factor in all investment and funding decisions. There are some smaller programs, which may have slightly higher ratios, but will not provide the total overall return that WAAS is expected to. An important element of the WAAS B/C ratio to remember is the fact that the FAA calculated the ratio based on very conservative estimates. Indeed, the FAA identified a number of benefits that were not quantified because of data that could not be verified at a high-confidence level within the resources of the study. If those benefits could be quantified and incorporated into the study results, the WAAS benefit/cost ratio would significantly increase. In addition, WAAS provides the enabling technology for a number of more advanced systems which will provide the basis of Free Flight. An example is ADS–B, which has received a great deal of interest from the user community, and is expected to provide significant additional safety and efficiency benefits, which would not be available without the navigation accuracy that WAAS provides.

Question. We have heard reports that late last year (1999) WAAS tests at the Tech Center were sufficiently poor as to cast a shadow on the scheduled WAAS implementation date summer 2000. Provide the committee the information about those tests and is a further delay contemplated from FAA's previously announced WAAS implementation date?

Answer. There will be additional time required to achieve initial operational capability (IOC). IOC is defined as a limited precision landing capability called Lateral Navigation/Vertical Navigation (LNAV/VNAV). The WAAS program now plans to

deliver LNAV/VNAV that will support a height above touchdown (HAT) of 350 feet in IOC.

The FAA is less certain about the approach for WAAS to achieve a precision approach down to 200 feet HAT, which is regarded as final operational capability (FOC). This lack of certainty is due to problems encountered with the system integrity, or the ability of the WAAS system to detect system errors and inform users of errors that can't be corrected. To address these system integrity problems, the FAA has engaged the knowledge and the experience of the WAAS Integrity and Performance Panel (WIPP). The FAA will be able to better evaluate the cost and schedule for FOC after the WIPP completes its work around December 2000.

The GPS Product Team plans to rebaseline the WAAS and LAAS projects in 2001 after firm cost and schedule estimates are developed. The Agency cannot definitively project final cost and schedule baselines at this time.

SATELLITE NAVIGATION

Question. The FAA is planning a transition from a ground-based civil air navigation system using signals generated by the Department of Defense's GPS. FAA is acquiring a WAAS–a network of equipment on the ground and in space-to enhance GPS so that the system can meet civil aviation requirements. Satellite-based navigation, using GPS/WAAS is expected to improve the safety of flight operations and increase airport and airspace capacity to meet future air traffic demands. Since 1995, WAAS has experienced significant cost growth of over $2,500,000,000 and schedule slippage of over three years. Recent announcements by the FAA that the program may experience more delays and added cost have raised questions about whether the WAAS program is heading in the same direction as the former Advance Automation System (AAS), which FAA canceled after it incurred significant cost growth and delays. What is FAA's current assessment of whether WAAS will meet its performance goals within current cost and schedule baselines?

Answer. Additional time is required to achieve initial operational capability. IOC is defined as a limited precision landing capability called LNAV/VNAV. The WAAS program now plans to deliver LNAV/VNAV that will support a height above touchdown (HAT) of 350 feet in IOC.

The FAA is less certain about the approach for WAAS to achieve a precision approach down to 200 feet HAT, which is regarded as final operational capability (FOC). This lack of certainty is due to problems encountered with the system integrity, or the ability of the WAAS system to detect system errors and inform users of errors that can't be corrected. To address these system integrity problems, the FAA has engaged the knowledge and the experience of the WAAS Integrity and Performance Panel (WIPP). The FAA will be able to better evaluate the cost and schedule for FOC after the WIPP completes its work around December 2000.

The GPS Product Team plans to rebaseline the WAAS and LAAS projects in 2001 after firm cost and schedule estimates are developed. The Agency cannot definitively project final cost and schedule baselines at this time.

Question. If the program will not meet its current goals, when will FAA announce new cost, schedule, and performance goals?

Answer. At the March 15, 2000, SATNAV Summit, the FAA provided an updated schedule projection for WAAS. It was stated that this schedule will be better defined in six to nine months after the WAAS Integrity and Performance Panel (WIPP) completes its work. The WIPP will address the necessary technical details to solve integrity issues to get to this initial capability and additionally will develop a high-level roadmap for WAAS to achieve the end-state capability. The participants of the SATNAV Summit, including key government and industry representatives, agreed to meet again at the completion of the WIPP activities, to present and discuss the results. Accordingly, the GPS Product Team plans to complete rebaselining the WAAS and LAAS projects in 2001 after a technical solution recommended by the WIPP is quantified in terms of cost and schedule.

Question. What steps are FAA and its contractor taking to ensure that WAAS does not become another AAS?

Answer. The FAA has learned from its experiences with AAS, and is striving to apply lessons learned, as appropriate. For example, whereas AAS strove to deliver a huge amount of capability at one time, WAAS is being developed to be implemented in a phased approach. There are some issues, however, that complicate this phased approach, and that is the requirement for integrity. In order for WAAS to be used for safety critical functions, the integrity requirement must be fully addressed with the initial delivery. The FAA is aggressively addressing integrity issues through the formation of the WIPP and the Independent Review Board (IRB). The WIPP is a team of technical experts, which will detail the work that needs to

be done by Raytheon to correct the problems with system integrity and identify the most realistic cost, schedule, and performance expectations. The IRB, which is a team of independent senior level experts, will oversee the work and progress of the WIPP and report directly to the FAA Administrator. Another example of applying lessons learned is the open communication with industry and users. The FAA is focusing on routinely communicating a very candid picture of the status and progress of the WAAS program.

WIDE AREA AUGMENTATION SYSTEM

Question. The WAAS prime contractor has informed the Subcommittee that extensive broadcasting of the WAAS signal will be required as part of its continuing development activity, both to demonstrate system performance as well as to validate assumptions that are part of the fault analysis. This is consistent with the conclusion reached by the Deleaney Commission in October 1997. Many WAAS avionics manufacturers also require a steady signal for their receiver certification activity, and some of these avionics manufacturers are also bringing to market non-certified receivers that can use the signal in its present configuration. Has the FAA considered making a public commitment that the WAAS signal will be provided in a limited level of service during the period leading up to FAA certification and declaration of initial operational capability? Would such a "test" period provide advantages to incrementally developing the various capabilities (runway incursion identification and en route activities) that the signal might ultimately be useful for, assuming the program can address the current integrity shortcomings, does not suffer any further setbacks, and can be cost beneficial at the margins with other programs?

Answer. Raytheon will indeed continuously broadcast WAAS signals, though it may be intermittent for short periods of time (minutes to a few hours in extreme cases) due to integration (that is, ground uplink station (GUS) switchover tests, correction and verification (C&V) failures from unproven private builds). Raytheon will be "hands off" the system during the five integration tests (21 day) and during the 60-day test. The details of these demonstrations are being finalized with Raytheon. Once they are finalized, they will be shared with the receiver manufacturers and those developing technologies that depend on WAAS. Continuous broadcast of the WAAS signals are therefore critical for the completion of WAAS receiver and WAAS ground system testing. The FAA plans to officially announce to the public that the WAAS signal is available for use in non-safety critical functions. This announcement will be made after Raytheon has completed the 21-day stability test (around June/July 2000). As such, the FAA plans to broadcast an increasingly operational-like signal during several periods from now through contract acceptance inspection (CAI), and then continuously at all times from CAI on.

Some examples of non-safety critical functions include ADS–B applications such as avoidance of runway incursions using runway situational awareness, and terrain avoidance warning systems.

WAAS INTERNATIONAL POSITION

Question. The following excerpts are from an article in the Thursday, March 30, 2000 Aviation Daily: "Delegates to an international symposium in Bonn rejected dependence on a single technology in favor of retaining a diversity of systems as advanced navigational technologies become operational. The March 22–23 conference, an initiative of the Germany Federal Ministry of Transport, was organized by the German Institute of Navigation and supported by the Northwest Europe Loran-C System (NELS) inter-governmental consortium. Discussions focused on determining the optimum mix of satellite and terrestrial systems to ensure safety of life and property while minimizing costs to the provider and users.

Data communications using the Loran-C navigation system for distribution of satellite error corrections and position integrity also received much attention. Building on the concept employed by the United States. Defense Department for communication with the Polaris submarine fleet, a team of Delft University has developed an advanced error-correcting version of the technology called Eurofix that is now being installed for operational use in Europe. The technology and status of Eurofix implementation was presented and supported with an on-air demonstration. Further innovations to the Eurofix concept to provide an alternative to the GPS WAAS were presented by the United States Coast Guard."

Given the continual difficulty the FAA has had with the WAAS procurement and the concerns about sole source navigational concepts, jamming, and other issues, is the FAA doing any work on evaluating or exploring other satellite navigational architectures similar to what the Aviation Daily article mentions (or other concepts)?

Answer. The FAA is currently in the process of evaluating Loran-C as a potential means of providing navigation to users of the National Airspace System (NAS). These evaluations include (a) use of a magnetic field (H–field) antenna to reduce or eliminate precipitation static that can severely affect the use of Loran during rain and snow conditions; (b) next generation digital Loran receiver technology; (c) feasibility of integrated GPS/Loran/Distance Measuring Equipment receivers; and (d) capability of Loran to provide a data path for WAAS correction information. An integrated Government/Academic/Industry team led by the FAA and including members from the Coast Guard, Coast Guard Academy, Ohio and Stanford University, Booz-Allen & Hamilton, and Illgen Simulations is conducting these evaluations, which will include actual flight demonstrations in fiscal year 2001. The FAA is also working with the University of Alabama to explore feasibility of using gyroscopic technology to provide a redundant aircraft navigation capability. The challenge of this effort is to provide a precision capability at costs acceptable to all users.

WIDE AREA AUGMENTATION SYSTEM

Question. The Committee is hearing increasing concerns that signal integrity may be a concern with the LAAS procurement and the difficulty of assuring signal integrity increase as the system is evolved to Category II and III approaches. What work has been done to address this issue up front so as not to repeat the WAAS experience?

Answer. The FAA has been aware of the challenge of certifying the LAAS integrity for a number of years. The challenge was first recognized during the LAAS Special Category I (SCAT–I) Type Acceptance certification process in the mid–1990's. During that time a special LAAS Integrity Panel (LIP) was formed to review the applicant vendor's integrity algorithms. The LIP certification process provided the LAAS technical team members with valuable exposure to the various integrity concepts being proposed as well as providing insight into the particular technical challenge integrity certification posed. As evidence of the success of the LIP process a number of LAAS SCAT–I systems have already achieved FAA approval under the SCAT–I certification guidance, FAA Order 8400. Although SCAT–I is less challenging than CAT III the experience of the LIP has assisted in the identification of the major elements of technical risk for development and certification of a CAT III LAAS.

Based on the experience gained with the SCAT–I integrity certification process, the LAAS project has retained the LIP concept as part of its LAAS Cat I Type Acceptance process.

A more recent integrity certification challenge being addressed involves the differential error correction standard deviation, known as 'Sigma', and ensuring our LAAS message error distribution standard deviation overbounds the actual error. Special technical 'tiger teams' have been formed within the FAA and RTCA to address this issue. The FAA's Integrity Tiger Team, known as the Sigma Overbounding group, has reached an interim consensus on the integrity solution approach to take for Cat I. RTCA Subcommittee-159 Working Group–4 is also actively involved in ensuring that the integrity problem is addressed and solved and is providing advice on the overbounding problem.

Unlike WAAS, the LAAS architecture is simplified by ensuring integrity within the local area of the installed LAAS system. This is in contrast to the integration of the wide area differential error correction components that WAAS must use to generate and broadcast wide area differential corrections. Differential corrections for a local area simplify the integrity challenge for LAAS significantly.

In summary, the task of achieving and validating Cat III integrity remains a significant challenge. The experience already gained from the LAAS SCAT–I LIP and the experience being obtained from the LAAS Cat I Type Acceptance LIP certification process have both served to help us foresee the LAAS integrity certification.

USER REQUEST EVALUATION TOOL (URET)

Question. What is the timeframe and locations for URET deployment? What are the challenges to greater deployment of the technology? What procedures need to be established and implemented in order to fully achieve the efficiency offered by this technology? What are the procedural issues that must be addressed before greater utilization of this technology?

Answer. The URET prototype is currently in daily use at Indianapolis and Memphis. As part of Free Flight Phase 1, URET Core Capability Limited Deployment (CCLD) will be deployed for initial daily use to Memphis, Indianapolis, Kansas City, Cleveland, Washington, Chicago, and Atlanta starting in November 2001 through February 2002. URET CCLD development and deployment will address the major

technical challenges for greater deployment to the remaining centers. Additionally, procedural issues are being addressed by both our national and local (FAA/NATCA/PASS) user teams representatives based on the daily use of the URET prototypes at Indianapolis and Memphis. National and local procedures supporting reduced flight strip postings and markings must be implemented to fully achieve efficiencies offered by this technology. Both national and local procedures are being modified and used at Memphis and Indianapolis. We anticipate procedural issues will continue to evolve and we will address these issues, resulting from increased utilization of the tool, as they arise.

STARS

Question. When will the FAA present revised STARS baselines to Congress?

Answer. Revised STARS baselines will be presented to Congress upon final OMB approval the Terminal Acquisition Program Baseline (APB). The Terminal APB is presently undergoing final FAA internal review. A STARS Site Deployment Working Group has recently been formed to provide an updated waterfall schedule for delivery of STARS systems through 2008. This updated waterfall will be available the end of fiscal year 2000.

Question. How much program delay and added cost will the new baselines reflect over existing baselines? Over the original STARS baseline?

Answer. The "existing" STARS baselines did not change in cost but reflect the new terminal automation strategy, known as Option 8R, which addresses near-term infrastructure and modernization issues. In October 1999, the FAA Joint Resources Council (JRC) provided interim approval for the STARS F&E rebaselining.

The new baseline as presented and approved by the JRC, reflects an increase in F&E costs of $462,000,000. The following provides a comparison of the STARS original and new cost/schedule baselines:

[Dollars in millions]

	Original (9/96)	Option 8R (10/99)
Cost	$940.2	$1,402.6
Schedule:		
First FAA full service site ORD	12/98	12/02
Last FAA full service site ORD	2/05	9/08

Question. What outstanding issues must FAA address to ensure that STARS is delivered within its new cost, schedule and performance goals?

Answer. There are two outstanding issues that must be addressed to ensure that the STARS program is delivered within its new cost, schedule and performance goals.

The foremost issue is the amount of software remaining to be developed and tested to resolve human factors concerns. The current estimate of total source lines of code (SLOC) to be developed is 415,000. The FAA has identified and initiated a risk mitigation strategy via the implementation of incremental software builds, early operational assessments, early user involvement initiatives and active user community working group participation to ensure on time software development and testing performance.

The other issue involves the definitization of the STARS contract modification that incorporates the revised program strategy known as Option 8R. The FAA completed negotiations on Option 8R on March 27, 2000, and will have a contract modification in place by the Spring of 2000. This contract modification includes the STARS human factor enhancements requested by the unions. Based on the completion of these activities, the FAA will have a new contract baseline in place against which to track and monitor contractor performance.

Question. The FAA has a substantial investment in the deployment of STARS. The system is being deployed and will be an integral part of the FAA inventory of the next 20 years. STARS is based on commercial-off-the-shelf/non-developmental item (COTS/NDI) systems that are in operation worldwide for both terminal and en route applications and include Radar Data Processing (RDP) and Flight Data Processing (FDP). Inherent in STARS are safety critical en route automation functions such as Minimum Safe Altitude Warning (MSAW), Mode C Intruder, and Conflict Alert, all of which are included in the 2001 budget request. The STARS program will also benefit from Pre-planned Product Improvements (P3I) like the Center/TRACON Automation System (CTAS) and ADS–B capability that not only provide

benefits to the terminal area, but also to the en route environment. Accordingly, has the FAA considered using STARS for other air traffic automation applications such as modernization of the en route system's emergency back-up system?

Answer. As standard practice, the FAA assesses the ability of COTS/NDI solutions, both in the existing FAA inventory and in the commercial market place, to meet future system requirements. Through market survey assessment, the En Route Integrated Product Team received inputs from all interested vendors regarding the capabilities inherent in existing systems that could satisfy future en route requirements. The assessment determined that there is no existing system that could meet all en route requirements, and that additional development would be needed.

Because of traffic volume and complexity, the United States en route system requirements differ significantly from those of the terminal environment and other en route civil aviation authorities. As currently developed, the deployed STARS (and the COTS/NDI systems upon which it is based) will not meet en route system requirements. For example, the en route automation system must include all flight data processing (FDP) capabilities not currently contained in the terminal automation system.

Future en route system evolution will consider the integration of COTS/NDI products as potential components for radar data processing and FDP replacement solutions.

AIRPORT SURVEILLANCE RADAR, MODEL 11 (ASR–11)

Question. Now that the Department of Defense (DOD) has made the decision to proceed into production of the joint DOD/FAA ASR–11 radar, does the FAA anticipate a timely production decision for the ASR–11 radar in order to remain in step with STARS deployment?

Answer. The FAA anticipates a timely production decision, and we will ensure that this program is in proper alignment with STARS system deployments.

OCEANIC AIRSPACE

Question. What is the FAA's current strategy for implementing new communications, navigation, and surveillance technologies in oceanic airspace?

Answer. The FAA has initiated the Advanced Technologies and Oceanic Procedures (ATOP) acquisition to obtain an advanced and integrated automation system for the three Air Route Traffic Control Centers (ARTCCs) engaged in the control of oceanic air traffic.

The automation solution is expected to be adaptable to all three sites and to consist of flight data processing integrated with surveillance data processing, Controller Pilot Data Link Communications, Air Traffic Services Interfacility Data Communications, tools for dynamic workload allocation, and both short-term and long-term conflict detection/prediction capabilities.

The ATOP acquisition strategy is one that will leverage the global marketplace through taking advantage of available technology by purchasing an non-developmental system. The strategy provides for an iterative evaluation process where the FAA uses increasingly refined filters to determine which one of the systems available provides the best match between existing capabilities and our FAA workforce. It is the FAA's intent to modify procedures, to the extent consistent with the highest level of safety, to fit existing systems rather than engage in a large developmental effort. Prior to obligating the government to any significant resources, the FAA will have negotiated a multilateral agreement between the FAA, its union workforce and the contractor, which establishes low risk solution with firm price, schedule and cost baselines.

The FAA has already completed the majority of the evaluation process for the first filter. As part of the first filter, potential vendors were allowed to bring their candidate systems to the FAA's Technical Center for demonstration testing. The ATOP schedule provides for the evaluations to be completed with a selection recommendation for two vendors to move on to the next filter by the end of May 2000. Planning for the second filter, which will include first level operational testing, is already ongoing.

Question. What is the FAA's view on the contracting out of air traffic control?

Answer. In the short term, the FAA has initiated an air traffic control system replacement program called the Advanced Technologies and Oceanic Procedures (ATOP) acquisition which will introduce new Communication, Navigation and Surveillance technologies into the oceanic environment, supporting our customer's growing needs. Our controllers are very much involved in this activity and are working with our technicians and engineers to choose the right system and develop the oper-

ational procedures to support its introduction. On the longer term, the President recently directed the FAA to come back to him in 45 days with a plan for achieving broader reform of the air traffic control system. The FAA will consider this proposal during its deliberations.

Question. How much is the FAA paying potential oceanic contractors to participate in the procurement?

Answer. Each contractor received approximately $500,000 to participate in the show-me demonstrations for Advanced Technologies and Oceanic Procedures, for a total of $1,500,000.

WIDE AREA AUGMENTATION SYSTEM

Question. On April 1, 1996, the FAA began operating under a new procurement system. The new system was to enable FAA to address the unique needs of the agency and provide for more timely and cost effective acquisition of equipment and materials. Despite the Congress granting FAA this reform nearly four years ago, many FAA modernization projects, such as WAAS and STARS, have encountered significant schedule delays and cost overruns. Also, other projects, such as Oceanic Automation and National Airspace System Infrastructure Management System, have been significantly restructured. At least two independent reviews of the FAA's acquisition management system found that the agency had not achieved its acquisition goals of executing more timely and cost-effective programs. What steps has FAA taken to develop accurate information for use in decision making, including accurate estimates of the cost of programs and the time to develop them?

Answer. The FAA has established the investment analysis process as a way for the stakeholder organizations to work collaboratively to identify potential alternative technical solutions or approaches to a given shortfall in mission capability. This often includes a market survey and identification of potential trade-offs between requirements and cost and schedule. This emphasis on better cost and schedule planning earlier in the process should result in more accurate estimates.

Question. Since Congress granted the agency acquisition reform in 1996, how has this helped the FAA to meets its goals for ATC Modernization?

Answer. The agency's acquisition reform first authorized in 1996 has helped simplify, integrate, and unify elements of life cycle acquisition management into a more effective system. This has helped the FAA to meet its goals for ATC.

Acquisition reform has shifted focus to life cycle management of program, created an improved structure and processes for defining FAA needs and investments, established corporate-level decision making for FAA needs and investments, and increased involvement of stakeholders in decision-making process.

Substantially streamlined procurement processes have produced a 50 percent reduction in the time to award contracts and has increased the percentage of contracts awarded competitively and based on best value, improved communications with FAA vendors, and has an impact on improving delivery of products and services.

Question. What steps has FAA taken to ensure that it provides oversight of all its modernization projects-those under development as well as those in operation?

Answer. The FAA has initiated several different reform efforts aimed at providing oversight of its modernization project.

Performance Plans. FAA took an important step in support of culture change and improved performance by formulating and promulgating annual outcome-based, mission-focused performance goals and indicators in Lines of Business (LOB) performance plans. These plans are shared goals between applicable LOB's.

FAA Acquisition Executive Advisory Board (FAB). FAB is an established group of executives, across all lines of business to ensure that the appropriate steps are taken in the front-end of the acquisition process of all programs. FAB also, provides links between the Research, F&E, and Operations budgets.

Quarterly Acquisition Reviews. The FAA schedules these Acquisition Reviews for the sole purpose to inform senior managers and key executives about the status and risks in acquisition projects that are under way. Information from these reviews is intended to provide a basis for building consensus and discussing challenges that could inhibit the success of critical acquisitions.

Integrated Product Development System (IPDS). IPDS is a team-based process that established cross-functional teams throughout FAA's lines of business to produce effective and efficient products/services that satisfy customer/user needs. Past examples of successful team-based programs are the En-Route Display System Replacement (DSR) and Host and Oceanic Computer System Replacement (HOCSR).

FAA–integrated Capability Maturity Model (FAA–iCMM). The Agency developed and began using the iCMM as a unified approach for evaluating its processes and improving them. This cross-functional process involving employees from different

LOBs and is anticipated to further provide a more effective and efficient collaboration between Agency organizations in order to achieve higher levels of maturity on the model's scale.

Requirements Process. The requirements process was reengineered to establish a single organizational entity in order to better manage system requirements and ensure improved collaboration with the teams.

Portfolio Management. The FAA plans to implement portfolio management to aggregate investment candidates into funding categories in order to facilitate managing the capital investment portfolio as a whole, increasing benefits, and managing risks.

Question. What is the status of FAA's effort to reform its culture, including fully implementing integrated product development teams to acquire and management systems?

Answer. The FAA's strategy for acquisition culture change is a dynamic process that provides a framework and focal point for integrating individual interventions of various organizational elements and strengthens the drive toward better performance. The FAA has instituted important structural and procedural changes designed to eliminate culture, acquisition, and organizational problems of the past:

Integrated Product Development System (IPDS). This process is helping to transform how the Agency does business, and facilitates breaking down stovepipe organizational barriers. Through IPDS, the Agency is focusing on corporate issues and problems affecting the FAA, such as human factors, and life cycle acquisition management. IPDS is gradually changing how employees and management interrelate by recognizing the value and utility of cross-functional teams for applicable tasks and how employees are empowered by managers.

Other ongoing initiatives designed to change and improve the Agency's culture include the requirements process and performance planning. The requirements process has been reengineered to better manage system requirements and ensure improved collaboration with the teams. FAA has taken an important step in support of culture change and improved performance by formulating and promulgating outcome-based, mission-focused performance goals and indicators in our performance plans.

Performance-driven behavior change within a large organization, such as the FAA, is a challenging task. Change management of this magnitude and difficulty can be successful over time and with the consistent and focused attention of its leaders. The Agency is making progress in all three areas identified in the 1999 Booz-Allen & Hamilton Report. The FAA is making progress through a variety of efforts to change the acquisition culture, overcome organizational barriers ("stovepipes"), and recognize and address gaps in AMS. The FAA is committed to having a workforce and business practices that are adaptable to changing aviation and technological environments and that provide the safest, most efficient and responsive aerospace system in the world.

INVESTMENT PORTFOLIO

Question. In its April 1999 report on FAA's investment management approach, GAO said that the Acquisition Management System was a good first step in establishing a structured, disciplined process for managing FAA's modernization investments, but concluded that the system had some very significant shortfalls that limited its effectiveness. GAO made five recommendations designed to correct problems it had identified with the system. GAO directed the FAA to establish and control a complete investment portfolio, including those projects already in operation. What has been done to implement this recommendation?

Answer. The FAA has developed the CIP with associated funding requirements for five years that tie to OMB outyear targets. This plan is the basis of the agency's investment portfolio for selecting and controlling investment decisions. The FAA is developing full life-cycle baselines for acquisition programs, which are included in the agency's CIP. The agency will incorporate in to its CIP all of the future F&E appropriation funded programs in its CIP.

Question. Exactly how many projects and systems are in the modernization investment portfolio?

Answer. Within the agency's CIP, there are 113 identified projects in the ATC services and facilities sustainment and new ATC services groupings that constitute the agency's modernization effort.

Question. Of those, how many have reliable cost baselines?

Answer. The FAA has baselined 29 major acquisition programs in the services and facilities sustainment groupings. There are an additional 17 major acquisition programs with baselines in process or identified to be baselined.

Question. When will the FAA have reliable operations cost baselines for every project in your investment portfolio?

Answer. To date the FAA has approved operations baselines for 15 CIP and ten legacy projects, accounting for over 55 percent of the operations cost identified in the System Architecture. The 15 CIP projects with operations cost baselines include seven baselined in fiscal year 1999 and eight in fiscal year 2000. By the end of fiscal year 2000, the FAA has targeted an additional ten CIP projects for baselining. This would bring the total operations baselines of CIP projects to 25. We are assessing how best to complete all baselines for the 113 identified F&E projects.

REPORTING ON ESTIMATED VERSUS ACTUAL PERFORMANCE

Question. GAO reported in April 1999 that information use to control projects was incomplete since FAA had not fully implemented as effective process for controlling the baselines for the costs, schedules, benefits, performance, and risks of its investments. At that time, FAA had approved baseline information for only half of the required universe of projects and the agency's processes for tracking actual performance against estimates frequently had provided incomplete information. The acquisition management system had been in place for three years when the GAO report was issued in April 1999. Why, then, was the FAA only able to establish and approve baselines for half of the projects during that three-year period?

Answer. The universe of projects targeted for baselining in GAO's report were F&E funded programs. Many of the projects were undergoing investment analysis and were, therefore, premature to baseline. The FAA currently has 44 projects baselined, and plans to have four more projects baselined by the Spring of 2000, which provides baselines for over 70 percent of F&E expenditures.

Question. Why is it taking so long for the FAA to develop and finalize the most basic baseline data on these key projects?

Answer. Of the F&E funded programs in the universe of projects identified in GAO's report, many are still undergoing investment analysis and will not have baselines until after the Joint Resources Council (JRC) approves the investment. Since programs are being managed to baselines, it is very important to develop accurate baselines. That can not be done until the investment analysis is complete and the number of systems to be purchased is determined along with a detailed estimate of system costs.

Question. GAO also found that the FAA frequently has incomplete reports on projects' estimated versus actual performance in the areas of cost, schedule, benefits, and performance. What has the FAA done to change this situation?

Answer. The FAA developed a centralized information system known as the Simplified Program Information Reporting Evaluation database. Programs are required to report variances to their cost, schedule, performance, and benefits baselines monthly. All program variances are tracked and included in a quarterly report to the JRC. Substantial acquisitions with variances greater than 10 percent are reported to the FAA Administrator for her determination to continue or terminate the program.

Question. Given the substantial cost overruns, lengthy delays, and significant performance shortfalls that have characterized FAA's modernization program, how important is it for the FAA to closely monitor and document its estimated versus actual performance?

Answer. A program's estimated versus actual performance is monitored at the highest level in the FAA. The FAA has developed an information system known as the Simplified Program Information Reporting Evaluation system, in which programs report monthly on variances to their program's baseline. Variances to baselines are monitored and documented in a quarterly report to the JRC. In addition, key officials are briefed monthly by the product teams on the status of cost, schedule, performance, benefits, and risk. Similarly, members of the JRC are briefed semi-annually on these same areas. The Associate Administrator for Research and Acquisitions (the Federal Acquisition Executive) obtains a monthly status of key milestones for critical projects via updates to the Program Status Matrix wall charts. Finally, the FAA Administrator is notified of substantial acquisitions with variances of greater than 10 percent for her determination to continue or terminate the program.

Question. What specific steps are being taken to implement the GAO recommendations to ensure project officials fully track and document estimated versus actual results on all baseline elements?

Answer. The development of the Simplified Program Information Reporting and Evaluation System, variance tracking and reporting to FAA management, and reporting to the FAA Administrator variances of greater that 10 percent are some ex-

amples of FAA's progress in implementing the GAO's recommendations to document estimated versus actual results on the baseline elements.

NATIONAL AIRSPACE SYSTEM MODERNIZATION

Question. When will the FAA have a complete and enforced systems architecture for the ATC modernization program?

Answer. The FAA understands the question to relate to the technical architecture for the en route air traffic automation modernization that we define the allocation of functions, before the en route automation software is replaced. The technical architecture timing is dependent upon funding for fiscal year 2001. The technical architecture will be completed within one year of program funding and before production commitments are made to modify or replace the current 1970's technology software.

Question. When will the FAA complete its efforts to institutionalize sound cost estimating processes?

Answer. FAA uses sound cost estimating processes appropriate to the level of detail needed for a given estimate. The Agency has established a standard work breakdown structure, and completed the development of a Cost Estimating Handbook, dated January 2, 1998, which provides guidance for all our estimates.

COST ACCOUNTING SYSTEM

Question. When will the FAA have a cost accounting system in place?

Answer. The FAA is implementing the cost accounting system in phases by organization from fiscal year 2000 through fiscal year 2002. To date, the FAA has implemented en route and oceanic services for the Air Traffic Services (ATS) line of business. The fiscal year 1998 and fiscal year 1999 costs of these services have been identified. ATS Flight Service Stations will be added in fiscal year 2000 and terminal/tower services in the beginning of fiscal year 2001. The implementation schedule for all organizations is:

FAA organization	Date
ATS Flight Service Stations	June 2000.
ATS Terminal and Tower	October 2000.
Research and Acquisitions	February 2001.
Aeronautical Center	April 2001.
Airports/Commercial Space Transportation	November 2001.
Certification and Regulation	February 2002.
Civil Aviation Security	June 2002.
Staff Offices	September 2002.

FAA SOFTWARE PROCESSES

Question. When will the FAA be able to report that its software processes are at a mature level? What challenges are causing this effort so long to complete?

Answer. FAA is improving its processes using an integrated approach that improves systems engineering, software engineering, acquisition, and management processes simultaneously via the FAA's integrated Capability Maturity Model (FAA–iCMM). There are nine process areas that must be performed at a planned and tracked, and repeatable capability level to be considered maturity level 2. The nine process areas are: Needs, Requirements, Outsourcing, System Test and Evaluation, Transition, Project Management, Contract Management, Quality Assurance and Management, and Configuration Management. The Agency has recently completed a major appraisal of eleven engineering and acquisition programs spanning the FAA acquisition lifecycle, and also have appraised the maturity of several processes performed across the FAA Technical Center. The results of these appraisals indicate that the majority of the programs or organizations assessed have achieved capability level 2 for most of the nine maturity level 2 process areas that are relevant to the engineering and acquisition activities that each program/organization performs. Several of the eleven programs assessed have reached full maturity level 2. Those programs that have not yet completely reached maturity level 2 are currently preparing action plans, which when implemented, will allow them to reach full maturity level 2 by the end of fiscal year 2000.

Additionally, the FAA continues to build on the process improvement accomplishments to date. Overall, FAA is performing extremely well in improving its processes following an integrated approach. This integrated effort is being achieved at a pace

faster than the industry norm, where typically it takes 25 months to improve from level 1 to level 2 on the Capability Maturity Model (CMM) for software alone. In roughly that timeframe, FAA has been achieving mature process on the FAA–iCMM, which is equivalent to achieving comparable maturity on three CMMs simultaneously: the CMMs for Software, Software Acquisition, and Systems Engineering. Because of continuing changes in technology and in the identification of new or improved "best practices," process improvement can never be considered complete.

ACQUISITION REFORM

Question. How has acquisition reform helped the FAA meet its goals for ATC modernization? How has it impeded the FAA from meeting those goals?

Answer. The agency's acquisition reform authorized in 1996 has aided to simplify, integrate, and unify elements of life cycle acquisition management into a more effective system, which has helped the FAA to meet its goals for ATC modernization. Acquisition reform has shifted focus to life cycle management of programs, created an improved structure and processes for defining FAA needs and investments, established corporate-level decision-making for FAA needs and investments, and increased involvement of stakeholders in decisions. Substantially streamlined procurement processes have produced a 50 percent reduction in the time to award contracts, increased the percentage of contracts awarded competitively and based on best value, improved communications with FAA vendors. It also improves the delivery of products and services.

FACILITY SECURITY

Question. When will the FAA correct known weaknesses and complete security accreditations for its 187 facilities?

Answer. The FAA has established a six-year program to upgrade security and complete accreditation of approximately 1,000 staffed facilities, not 187 as referenced in the question. Upgrades and accreditations are planned for completion by 2005.

AIR TRAFFIC CONTROL SYSTEMS ASSESSMENTS

Question. When will FAA complete its efforts to assess, certify, and accredit all air traffic control systems, as required by agency policy?

Answer. The FAA plans are to complete the certification and authorization of its critical air traffic control systems by May 2003. This date is dependent upon required funding to support the risk assessments and mitigation of any high-risk items or vulnerabilities found during the assessment process.

AIR TRAFFIC CONTROL SECURITY REQUIREMENTS

Question. When will the FAA complete its efforts to ensure that specifications for all new ATC systems include security requirements based on detailed security assessments?

Answer. The FAA will complete all risk assessments for new ATC systems by May 2003, in accordance with Presidential Decision Directive 63. High-level NAS requirements have been developed. The FAA is currently developing "protection profiles" at the system level in compliance with National Institute of Standards and Technology standards. These protection profiles will define security requirements for new NAS systems.

BACKGROUND CHECKS

Question. In December 1999, GAO reported that the FAA had not consistently performed background checks or investigations on contractor employees, as required by its policy. In fact, GAO provided an example in which 36 mainland Chinese nationals were provided copies of some of FAA's most important air traffic control systems, but had not undergone background searches as required by FAA policy. GAO made several recommendations to address security weaknesses, and FAA agreed to implement these recommendations. What are the FAA's plans for enforcing its policy on background checks or investigations to ensure that such a lapse does not occur in the future? When will the FAA complete its efforts to address the GAO recommendation?

Answer. FAA has taken swift action to address the key issues identified in the December 1999 GAO report, and continues longer-term actions to ensure that it has the policies and procedures in place to ensure background checks or investigations are conducted, as necessary, on contractor employees.

FAA's Civil Aviation Security (ACS) provided contractor personnel security requirement briefings to acquisition personnel during the month of March 2000 to heighten their awareness of the requirements of FAA Personnel Security Order 1600.1D, and remind them of their responsibilities under the order.

The FAA Office of Acquisitions has developed, in coordination with ACS and Legal Counsel for Procurement Policy, new security provisions (clauses, guidance, prescriptions, and forms) for use in new, as well as existing contracts. The new prescriptions require contracting and operating offices to implement the requirements of 1600.1D in all contracts, unless a determination is made that no access by Contractor personnel to FAA facilities, sensitive information and/or resources is required.

These new provisions clarify the requirements for conducting risk/sensitivity level determinations for each applicable position under a contract and for mechanisms to allow initiating appropriate background checks/investigations prior to allowing a contractor employee to start or to continue work on a FAA system.

Since January 2000, the FAA continues reviewing all of its existing contracts, as well as all new contracts before issuance, to ensure appropriate risk/sensitivity level designations for applicable positions under those contracts are made. Where appropriate, FAA is incorporating the appropriate security provision(s), which call for contractor employees to provide necessary forms to allow the FAA to conduct, as necessary and appropriate, the background checks/investigations.

ACS is developing procedures, intended to be in place by September 2000, for conducting semi-annual audits of contracts for the sole purpose of monitoring compliance with FAA order 1600.1D.

All existing, as well as newly awarded, contracts should be modified by the first ACS review in September 2000.

In accordance with the order, ACS will ensure the required background checks or investigations are conducted and will maintain a contractor personnel database.

OVERSIGHT OF AVIATION REPAIR STATIONS

Question. Last summer, the FAA issued two NPRM's concerning oversight of aviation repair stations. One concerned the training and certification requirements for repair station personnel. This NPRM was subsequently withdrawn. What are the reasons for the withdrawal of the NPRM, and what is the FAA's plan for issuing a revised NPRM? The other NPRM had been several years in the making and addressed more comprehensively the oversight of repair stations. The comment period was extended and expired the end of last year. Can you estimate when a final rule will be published?

Answer. The Revision of Certification Requirements: Mechanics and Repairmen NPRM was published on July 9, 1998. More than 1500 commentaries responded to the NPRM. Most of the commentaries opposed the provision in the NPRM to establish the Aviation Maintenance Technician and Aviation Maintenance Technician (Transport) certificates. Several associations such as the Regional Airline Association, the Aircraft Owners and Pilots Association, the Aeronautical Repair Manufacturers, and the National Air Transportation Association opposed the NPRM and some associations asked the FAA to withdraw the NPRM. As a result, the notice to withdraw the Revision of Certification Requirements: Mechanics and Repairmen NPRM was published on August 5, 1999. The NPRM was withdrawn due to the large number of comments that were received in opposition. A review is being conducted to determine what actions are needed to bring Part 65 in line with the comments received and whether or not to reissue Part 66.

The Part 145 Review: Repair Stations NPRM was published on June 21, 1999, with a comment period deadline of October 19, 1999. The comment period deadline was extended to December 3, 1999. The FAA received 535 comments in regards to the NPRM. The FAA is currently analyzing these substantive comments and anticipates publishing the rule April 3, 2001, which is within 16 months of the comment period deadline and in accordance with the FAA Reauthorization Act of 1996 final rule publication requirements.

PROTECTION OF VOLUNTARILY SUBMITTED INFORMATION

Question. For many years flight safety experts have identified the proactive use of data from flight data recorders as an essential means of achieving the eighty percent reduction in aviation accident rates set by the White House Commission on Aviation Safety and Security. One of Administrator Garvey's first acts as FAA Administrator was to expedite rulemaking that would enable the use of this information. Yet it was only last fall that a NPRM protecting this information from release

under the FOIA was issued. Why did it take so long to issue this NPRM, and when do you anticipate a final-rule?

Answer. The FAA initiated the Protection of Voluntarily Submitted Information rulemaking on December 11, 1996, as a result of a requirement established in the FAA Reauthorization Act (Act) of 1996 and a recommendation from the White House Commission on Aviation Safety and Security. The Act allows the Administrator, through FAA regulations, to protect from disclosure voluntarily provided information related to safety and security issues. The White House Commission on Aviation Safety and Security noted that the most effective way to identify problems is for people who operate the system to self-disclose the information, but there is reluctance to provide information to the FAA unless it can be protected.

Throughout the NPRM process, the determining of the rule's scope and approach and performing economic analysis required coordination within FAA as well as the Office of the Secretary of Transportation and the Office of Management and Budget. Issues identified at each stage of the review process required resolution prior to the publication of the NPRM.

The Protection of Voluntarily Submitted Information NPRM was published on July 26, 1999, with a comment deadline of September 24, 1999. On September 21, 1999, the National Transportation Safety Board requested that the FAA extend the comment period by 30 days. Consequently on October 5, 1999, the FAA published a notice reopening the comment period for an additional 30 days resulting in the closing of the comment period on November 4, 1999. The FAA is developing the final rule, and anticipates publishing the rule by February 26, 2001, which is within 16 months of the close of comment period and in accordance with the FAA Reauthorization Act of 1996 final rule publication requirements.

AIRPORT MOVEMENT AREA SAFETY SYSTEM (AMASS)

Question. Given the difficulties with AMASS procurement, does it make sense to take a step back from the program and consider whether other emerging capabilities within other procurements that have not experienced comparable difficulties might have complementary or corresponding capabilities that could obviate the concerns that the AMASS program purportedly should address. Does the ADS–B program have a role to play in addressing the runway incursion problem?

Answer. The FAA has completed an in-depth review and restructuring of AMASS and concluded that the revised program goals will be met. The AMASS system is a key player in helping prevent accidents that could result from runway incursions. Yes. The ADS–B program does have a role to play in addressing the runway incursion problem.

The total program quantity of 40 systems are on contract utilizing prior year funding authority; 29 systems have been delivered and 23 systems have been accepted by the FAA. A total of 38 systems will be installed at the 34 highest priority airports, with two support systems in Oklahoma City. With active union participation and new program management in place, the program is now on schedule. Human factor issues critical to the commissioning process have been corrected. Operational Test (OT) critical issues have been resolved and have passed factory testing and field testing in Atlanta. The OT regression testing to validate the corrections is on schedule to be completed in June 2000. Initial operating capability (IOC) is on schedule for August 2000. The Independent Operational Test & Evaluation will follow starting in September in San Francisco and in October in Detroit. First AMASS commissionings are scheduled for early calendar year 2001, following completion of the required FAA in-service review process.

The ASDE–3/AMASS is the only currently available technology that includes safety logic that has been formally operationally tested with the participation of FAA Airways Facilities and Air Traffic personnel. Technologies such as multilateration and data fusion, which are being tested at Dallas/Fort Worth airport, under a research and development program, still required an extensive development effort to become operationally suitable in the FAA's National Airspace System. A new program named ASDE–X, now in the acquisition phase with a contract award scheduled for September 2000, will incorporate these new technologies. These new technologies will not include the safety logic that is the core of the AMASS system. The ASDE–X systems are planned to be deployed at airports other than the ASDE–3/AMASS sites. The current schedule for AMASS includes commissioning of all systems by the end of calendar year 2002, prior to the first possible commissioning of an ASDE–X system scheduled for calendar year 2003.

ADS–B will be able to contribute two critical solutions to the runway incursion issue. The first component would provide ADS–B target information to the controllers. This capability would be similar to radar based ASDE display functionality in

the tower cab, but would provide controllers with more accurate target information, such as aircraft data tag and precise GPS derived position.

The second component is ADS–B driven cockpit surface moving map displays. Safe Flight-21 is currently developing commercial cockpit displays, which provide pilots critical information such as their precise position on the airport surface relative to other aircraft occupying runways or about to land. This tool should be very effective in reducing the number of pilot and vehicle deviations, by providing pilots and ground vehicles the same "situational awareness" picture afforded only to tower controllers today. More importantly, since ADS–B works between equipped aircraft pairs, cockpit moving map displays would offer a level of safety at airports that currently don't have ASDE equipment.

AIRPORT IMPROVEMENT PROGRAM

Question. Please provide a listing of the top 50 airside airport projects that add capacity to the system. Please provide the estimated costs of such projects and the years in which those costs occur. In addition, please provide any relevant cost benefit information with those projects.

Answer. New runways generally provide the largest increases in airside capacity. Twenty-eight new runways have been identified at the 100 busiest airports in the National Plan of Integrated Airport Systems as a result of local planning efforts for a total estimated cost of nearly $7,000,000,000 for all 28 runways. Construction of these new runways represents many more than 50 airside airport projects; however, for purposes of providing a meaningful level of information, projects are listed at the airport level, without breaking airport initiatives into lower level airside airport projects.

Of the 28 proposed new runways, four are under construction with runway operational dates of: 2000 for Phoenix; 2001 for Detroit; 2003 for Minneapolis; and 2006 for Seattle. Following is the list of airports with planned runways through 2010. Benefit-cost analyses and funding plans (approved Letters of Intent) for Detroit, Minneapolis, and Seattle have been completed. The remaining locations either are or will be examined as the AIP project approval process evolves.

TOP 100 AIRPORTS

Proposed New Runways (through 2010)

LOCID	City, State	98 Rank	Hub Category	Runway Identifier	Opening Date	Work Begun	Cost (Millions)	Status
PHX	Phoenix, AZ	9	Large	7/25	Oct-00	1997	$185	Under Construction
DTW	Detroit, MI	10	Large	4/22	2001	1999	$116	Under Construction
CLE	Cleveland, OH	33	Medium	5W/23W	2002		$1,000	Construction to begin 10/00
MIA	Miami, FL	8	Large	8/26	Early 2003		$206	
MCO	Orlando, FL	16	Large	17L/35R	Early 2003		$132	
CLT	Charlotte, NC	21	Large	18W/26W	2003		$140	
MSP	Minneapolis, MN	15	Large	17/35	Late 2003	1999	$490	Under Construction
IAH	Houston, TX	14	Large	8L/26R	2003		$130	EIS Underway
DEN	Denver, CO	6	Large	16R/24L	2004		$160	
SRQ	Sarasota-Bradenton,FL	91	Small	14L/32R	2004		$10	
ATL	Atlanta, GA	1	Large	9S/27S	2005		$450	
CVG	Cincinnati, OH	23	Large	18R/36L	2005		$233	
IAD	Washington Dulles, VA	28	Large	1W/19W	2005		$200	
GSO	Greensboro, NC	75	Small	5L/23R	2005		$96	
BOS	Boston, MA	17	Large	14/32	2005		$50	
DFW	Dallas-Ft. Worth,TX	4	Large	18R/36L	2005		$367	Need Environ. Revalidation
ORF	Norfolk,	72	Small	5R/23L	2005		$100	
TUS	Tuscon, AZ	65	Medium	11R/29L	2005		$30	
STL	St. Louis, MO	13	Large	12/30	2006		$850	
SEA	Seattle, WA	18	Large	16W/34W	2006	1999	$773	Under Construction
PIT	Pittsburgh, PA	24	Large	10/28	2006		$150	
BWI	Baltimore-Washington, MD	27	Large	10R/28L	2008		$150	
IAD	Washington Dulles, VA	28	Large	12R/30L	2008		$200	
IND	Indianapolis, IN	44	Medium	5R/23L	2008		$80	
MSY	New Orleans, LA	40	Medium	18/36	2010		$400	Environmental Not underway
RSW	Ft. Myers, FL	61	Medium	6R/24L	2010		$80	
GSP	Greer-Greenville	95	Small	3R/21L	2010		$65	
TUL	Tulsa, OK	67	Medium	18/36	2010		$115	
SFO	San Francisco, CA	5	Large					EIS underway (ROD 2001); 2007
TOTAL							$6,958	

Local planning efforts have identified 28 new runways at the top 100 airports through 2010. This does not constitute approval of or a commitment on behalf of the FAA to participate in the funding of these runways.

REVENUE DIVERSION

Question. The GAO reported that (1) unauthorized land use at general aviation airports had results in safety hazards and led to revenue diversion or loss, which FAA has not always addressed; (2) airport revenues have been diverted at Bader Field, New Jersey and at Queen City Airport in Pennsylvania, since the early 1970's and (3) FAA's decision to allow Kansas City to sell the Richards-Gebaur Memorial Airport without an appraisal or ensuring the fair market value was improper. In its response, FAA stated that its field offices were aware of the cases cited by GAO. FAA said it prefers to address noncompliance through negotiations and settlement with the airport sponsor. FAA said it was carefully reviewing the proposed leases of the Richards-Gabaur Airport and would consider amending the Memorandum of Agreement or rejecting the structure of the sale. GAO recommended that FAA's compliance policy guidance be revised to require among other things, periodic on-site visits and to include specific criteria for initiating enforcement actions and set reasonable time frames for taking progressively stronger enforcement actions in cases where efforts to achieve voluntary corrective action are unsuccessful. If FAA field offices knew about these unauthorized land uses, safety hazards, and diversion of revenues, abuses that in several cases cited by GAO, went on for decades, why didn't the agency take actions to stop them?

Answer. In the past the FAA encouraged its field offices to resolve compliance issues on an informal basis. The consequence was that some negotiations took unacceptably long periods of time. Now, thanks in part to the February 16, 1999, issuance of the FAA Policy and Procedures Concerning the Use of Airport Revenue and the Rules of Practice for Federally Assisted Airport Proceedings (published October 16, 1996), the issues are defined more clearly, negotiations are more focused, and the FAA is quicker to use its administrative process to assure compliance. Additionally, each region remains responsible for monitoring and surveillance of airport sponsor compliance with Federal obligations on a routine basis. FAA HQ monitors the regions compliance monitoring and surveillance by requiring each region to submit a semiannual compliance monitoring and surveillance report to the Airport Compliance Division at FAA Headquarters. This report includes, but is not limited to, each region's land release activities, compliance evaluations and determinations, as-well-as corrective and enforcement action taken to effect airport sponsor compliance.

Question. Is there a time frame for how long the FAA will allow airport land to be usurped and revenues to be diverted before taking action?

Answer. Once the FAA becomes aware of an alleged violation of an airport sponsor's Federal obligations it acts immediately to investigate the alleged violation either formally or informally. Our first choice in addressing an apparent airport owner assurance violation is always to seek voluntary compliance through the informal compliance efforts of our regional offices, or to otherwise resolve the issues at the regional level. However, when voluntary compliance cannot be achieved, FAA Headquarters will initiate a formal FAA investigation in accordance with FAR Part 16. FAA policies and procedures do not provide a standard time frame in which corrective actions must be completed because all cases are different. In most cases, the actual time taken to complete enforcement action can be attributed to the time associated with the FAA informal and formal administrative processes, and the legal requirement to provide the opportunity for correction of the condition prior to enforcement action, as provided in FAR Part 16. The time frame for the compliance process may vary greatly depending on the complexity of the case and the airport specific circumstances. However, it has always been FAA's policy to resolve compliance matters as quickly as possible.

Question. Provide some instances and dates when the FAA has taken enforcement action in the past five years. More specifically, what enforcement action has the FAA taken to resolve long-standing instances of non-compliance and revenue diversion at the Queen City Airport in Pennsylvania and at Bader Field, New Jersey?

Answer. The FAA has taken the following enforcement action with regard to Queen City and Bader Field.

Queen City. The FAA worked extensively with the City of Allentown, Pennsylvania, to resolve the Office of Inspector General's finding of a $2,400,000 revenue diversion at the Queen City Airport. Although the city disagrees with the amount of the finding, it entered into negotiations with the Lehigh Northampton Airport Authority (LNAA) to transfer the Airport to the LNAA as a means of repaying the diverted revenue. As the result of the negotiations, the City and the LNAA agreed in principle to the transfer, but the transfer has not occurred yet, due to two unresolved issues. First, the city wants to continue its use of the Vultree hangar as a municipal garage. Second, the city proposed a plan to close both the Queen City and

the Lehigh Northampton Airports and replace them with a new facility. Since negotiations have stalled, the FAA is currently taking action to re-coup the revenue diversion reported in the audit finding.

Bader Field. The FAA continues to work with Atlantic City to resolve the land-use and safety issues at the Bader Field Airport. With regard to the land-use issues, the FAA is waiting for the city to support its claim that it provides sufficient financial aid to the Airport to offset any rent on the land that the city uses for non-airport purposes. With regard to safety issues, on March 3, 2000, the FAA issued an emergency Order of Compliance to the city that required the city to operate the airport in a safe manner. On March 6th and 10th the city met with the Assistant U.S. Attorney to discuss the steps the city must take to comply with the Order. The outcome of those meetings was a three-party agreement in principle among the city, New Jersey Department of Transportation, and the United States Attorney to improve signage and markings on the airport. The FAA is awaiting the signed copy of the agreement. If the city refuses to sign the agreement, the United States Attorney has the option of obtaining a court injunction to enforce the order. In the meantime, the FAA is continuing to conduct safety inspections at the airport.

Question. Has the FAA taken any steps to obtain information, either through site visits by the FAA personnel or from interested parties, regarding general aviation airport compliance with land and revenue use requirements?

Answer. The FAA continues to believe that the extent of unauthorized land use was overstated in the GAO report. GAO's random sample of 506 airports produced issues at only nine airports, or fewer than 2 percent of the airports surveyed. The FAA was aware of all those issues, which had been previously identified under long-standing procedures, such as FAA's formal and informal complaint processes, through which airport users often bring matters of airport sponsor non-compliance to the attention of the FAA. Moreover, the FAA is working on and continues to address the issues identified by the GAO.

Information on compliance matters at general aviation airports can come to the FAA from a number of sources or interested parties. Airport users at the airport are usually the initial source of information regarding potential problems with a sponsor's ability to comply with a its a grant assurances. This information can be brought to the agency's attention directly by the airport users in an aviation support group such as the Aircraft Owners and Pilots' Association Airport Support Network. State aviation departments that routinely conduct inspections of general aviation airports will also communicate with FAA local and regional offices about safety and compliance problems.

Also, the FAA proposes to select annually a total of 18 general aviation airports (two per region) to conduct on-site compliance inspections. The selections will be made based on prior or current knowledge of compliance issues at the airports. Absent such issues, The FAA will concentrate on airports that are large in size (extensive acreage as reported on the FAA Form 5010, Airport Master Record), in relation to the level of aircraft operations at the airport. Airports with substantial acreage and no aeronautical purpose for such land would presumably have more opportunity and incentive for unauthorized land use. To achieve this goal, we will employ airport compliance specialists in the field, or in the alternative, safety certification inspectors knowledgeable of airport compliance requirements will conduct on-site compliance reviews.

MILITARY AIRPORT PROGRAM

Question. Please provide a list of airports currently in the Military Airport Program (MAP) Program.

Answer. The following is a list of the 12 airports currently in the MAP. Eleven of these former surplus military airfields were declared surplus under the recent Department of Defense Base Realignment and Closure program and have been converted to reuse as civil airports. Chippewa County International is a former surplused military airfield currently being used as a civil primary commercial service airport. The list of 12 airports includes:

Austin-Bergstrom Austin, TX (BSM) (Bergstrom AFB)
Homestead Regional Miami, FL (HST) (Homestead AFB)
Millington Municipal Memphis, TN (NQA) (Memphis NAS)
Williams Gateway Phoenix, AZ (IWA) (Williams AFB)
Alexandria International Alexandria, LA (AEX) (England AFB)
Rickenbacker International Columbus, OH (LCK) (Rickenbacker AFB)
Sawyer Airport Gwinn, MI (SAW) (K.I. Sawyer AFB)
Myrtle Beach International Myrtle Beach, SC (MYR) (Myrtle Beach AFB)

Southern California International Victorville, CA (VCV) (George AFB)
Chippewa County International Sault Ste Marie, MI (CIU) (Kincheloe AFB)
Pease International Tradeport Portsmouth, NH (PSM) (Pease AFB)
Cecil Field Jacksonville, FL (VQQ) (Jacksonville NAS)

AIRPORT IMPROVEMENT PROGRAM

Question. Please provide a table showing AIP projects for which obligations were incurred more than two years ago and no cash expenditures have been made, similar in format to table provided in the past to the appropriations committees.

Answer. The AIP projects table is listed below.

Location	Airport	Project No.	Federal funds
Hayward, CA	Hayward Executive	09–97	$150,000
Oceano, CA	Oceano County	03–97	374,000
Oceanside, CA	Municipal	01–95	674,385
Sacramento, CA	Metropolitan	21–97	3,594,191
San Carlos, CA	San Carlos	07–97	108,000
San Luis Obispo, CA	County	15–97	704,007
Tracy, CA	Municipal	07–95	117,090
Hilo, HI	International	07–97	2,371,500
Honolulu, HI	International	39–97	933,000
Honolulu, HI	International	40–97	5,625,000
Honolulu, HI	International	41–97	3,455,075
Kalaupapa, HI	Kalaupapa	02–97	243,000
Kaunakakai, HI	Molokai	04–97	1,350,000
Lihue, HI	Lihue	19–97	3,422,963
Detroit, MI	Detroit Willow Run	17–97	345,267
Keene, NH	Dillant-Hopkins	13–97	962,280
New Hampshire	State	01–97	83,041
Atlantic City, NJ	International	23–97	250,000
New Jersey State	Block Grant	07–97	285,000
Newark, NJ	International	53–95	2,432,000
Newark, NJ	International	55–96	1,000,000
Flushing, NY	LaGuardia	50–94	1,216,000
Newburg, NY	Stewart Interntional	22–95	5,097,277
Newburg, NY	Stewart International	23–96	1,174,081
Newburg, NY	Stewart International	24–97	1,492,183
New York, NY	E. 34th Street	02–96	488,099
Syracuse, NY	International	49–97	1,616,699
Utica, NY	Oneida County	16–96	383,697
Las Vegas, NV	McCarran International	36–97	3,055,838
Reno, NV	Reno/Tahoe International	26–97	400,000
Reno, NV	Reno/Stead	13–97	500,000
Hazleton, PA	Municipal	06–95	500,000
Pennsylvania	State of Pennsylvania	SB–97	225,000
Philadelphia, PA	International	25–90	975,000
Total Fedral funds			45,603,673

Question. Please provide a copy of each letter of intent issued over the past year. Please provide a table outlining the commitment of AIP funds for letters of intent projects.

Answer. The FAA did not issue any new letters of intent (LOI) in fiscal year 1999. However, a number of applications were reviewed during the year, resulting in the recommendation to approve four. Three LOIs were issued after submission to Congress on March 3 for a 30-day period. The fourth LOI, for Dallas-Fort Worth International is being held pending development of mutually acceptable language concerning a possible AIP grant compliance issue. Copies of the proposed LOIs with commitments of AIP funds follow.

LETTER OF INTENT

Dallas/Fort Worth International Airport Dallas/Fort Worth, Texas

Project Description: Design and construct Runway 17C extension (2,012 feet), Runway 18L extension (2,012 feet), Runway 18R extension (2,012 feet), Northwest Holding Apron and associated taxiway development.

PAYMENT SCHEDULE

Fiscal year	Apportionment	Discretionary	Total
2000		$6,292,000	$6,292,000
2001		2,292,000	2,292,000
2002		3,292,000	3,292,000
2003		4,892,000	4,892,000
2004		4,892,000	4,892,000
2005		5,692,000	5,692,000
2006		5,692,000	5,692,000
2007		2,752,000	2,752,000
2008		2,552,000	2,552,000
2009		5,292,000	5,292,000
2010		6,000,000	6,000,000
Total	49,640,000	49,640,000	

MIAMI INTERNATIONAL AIRPORT MIAMI, FLORIDA

Project description: Construct new northside runway complex, consisting of: New Runway 8–26 (8,600 ft by 150 ft), relocated parallel Taxiway "L" (8,600 ft by 75 ft) and taxiway connectors, parallel Taxiway "K" (8,600 ft by 75 ft) and taxiway connectors; including airfield lighting and signage, grading and drainage, runway grooving, pavement marking, obstruction removal, removal of utilities, removal of buildings, and removal of contaminated materials. Construction includes airside service road and NAVAIDS (2 localizers with DME, REILS and 2 PAPIs).

PAYMENT SCHEDULE

Fiscal year	Apportionment (Entitlement & Cargo)	Discretionary	Total
2000	$7,000,000	$5,000,000	$12,000,000
2001	7,000,000	3,000,000	10,000,000
2002	7,000,000	2,840,000	9,840,000
2003	7,000,000	4,000,000	11,000,000
2004	7,000,000	5,000,000	12,000,000
2005		8,000,000	8,000,000
2006		7,550,000	7,550,000
2007		8,000,000	8,000,000
2008		4,000,000	4,000,000
2009		10,110,000	10,110,000
2010		8,540,000	8,540,000
Total	35,000,000	66,040,000	101,040,000

Orlando International Airport Orlando, Florida

Project description: Construct New Runway 17L/35R (9,000 ft by 150 ft) and Associated Taxiways (parallel Taxiway M and connecting Taxiways, crossfield Taxiways K, L, & Q) including airfield lighting and signage, grading and drainage, runway grooving, pavement markings, service/secure roadways, security fencing and equipment, obstruction clearing, and building demolition.

PAYMENT SCHEDULE

Fiscal year	Apportionment (Entitlement & Cargo)	Discretionary	Total
2000		$15,530,000	$15,530,000
2001		7,590,000	7,590,000
2002		5,000,000	5,000,000
2003	$4,600,000	5,000,000	9,600,000
2004	5,100,000	3,000,000	8,100,000
2005	5,360,000		5,360,000
2006	5,620,000		5,620,000
2007	5,900,000		5,900,000
2008	6,200,000		6,200,000
2009	4,780,000		4,780,000
Total	37,560,000	36,120,000	73,680,000

San Jose International Airport San Jose, California

Project description: Airfield improvements consisting of the reconstruction and extension of Runways 12L–30R and 12R–30L and associated taxiway improvements including drainage, lighting, signs, nav-aids and marking.

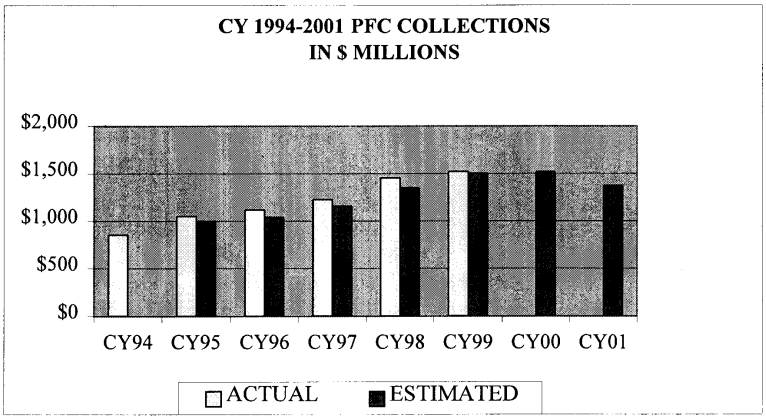
PAYMENT SCHEDULE

Fiscal year	Apportionment (Entitlement & Cargo)	Discretionary	Total
2000	$2,148,000	$20,000,000	$22,148,000
2001	2,190,960	3,000,000	5,190,960
2002	2,234,779	9,000,000	11,234,779
2003	2,279,475	9,000,000	11,279,475
2004	2,325,064	6,000,000	8,325,064
2005	2,371,566	6,000,000	8,371,566
2006	2,418,997	5,000,000	7,418,997
2007	2,467,377		2,467,377
2008	2,516,724		2,516,724
2009	2,567,059		2,567,059
Total	23,520,001	58,000,000	81,520,001

AIRPORT IMPROVEMENT PROGRAM

Question. Please provide a bar chart showing actual and estimated PFC collections for fiscal years 1994 through 2001. Please shade the actual bars with estimated commitment of collections to landside v. airside projects.

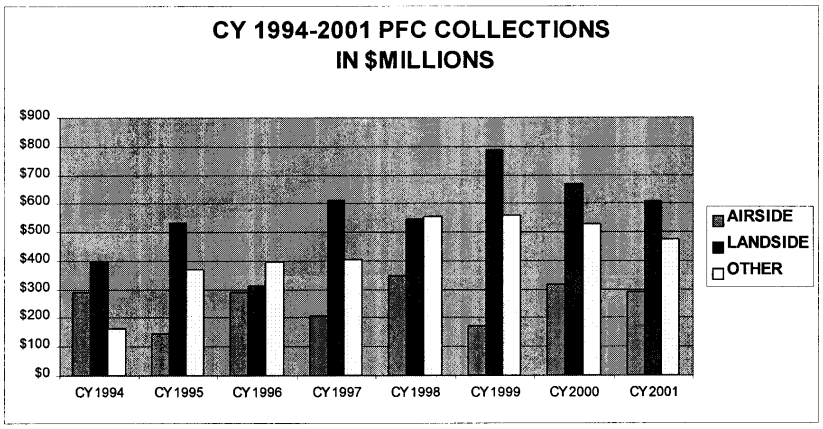
Answer. The following bar chart provides the requested information on actual and estimated PFC collections by calendar year. The FAA produces passenger facility charge (PFC) collection data based on calendar years (CY), not fiscal years, to avoid confusion among public agencies that use a variety of different fiscal year definitions.



The FAA has been conservative in its official estimates of future PFC collections. Estimated collections are based on latest published actual enplanement statistics and airports collecting PFCs as of the start of the year. CY 2000 and CY 2001 estimates in the bar chart do not assume new PFC applications or PFC levels above $3 and are therefore conservative. However, assuming new applications, PFC actual collections may exceed $1.55,000,000,000 in CY 2000 at the $1,600,000,000 in CY 2001 at the $3 level.

In addition, AIR–21 raises the maximum PFC level to $4.50. The FAA is unable to ascertain at this time the number or airports that will seek or the number of projects that will qualify for the higher $4.50 PFC. However, assuming that all eligible airports seek and implement the higher PFC, it could generate as much as $200,000,000 in additional CY 2000 and $700,000,000 in additional CY 2001 collections.

The next bar chart provides an estimated allocation of PFC collections by landside, airside, and other projects. "Landside" projects in this chart include ground access and terminal projects. "Airside" projects include runways, taxiways, aprons, and associated airfield projects. "Other" projects include debt payments (typically for a blend of project types), planning, noise, and miscellaneous items. Allocation to these categories was done by reviewing annual PFC authority approved by project type and applying the resulting ratios to collections in that year. This allocation approach provides the clearest indication of annual variations in project mixes submitted to the FAA for PFC approval. The project allocations for 2000 and 2001 are based on the average ratios of the prior six years.



QUESTIONS SUBMITTED TO THE FEDERAL HIGHWAY ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

DISCRETIONARY BRIDGE FUNDING

Question. Please provide a list of all bridges eligible for discretionary bridge funding for which the agency has (or expects within the next fiscal year) an application. Please indicate whether such bridge is eligible for discretionary funding, other discretionary programs.

Answer. The following lists contain bridge candidate projects (both seismic and non-seismic) that were considered for fiscal year 2000 funding under the Discretionary Bridge Program. The status of our actions on each project are noted in the tables. For fiscal year 2001, the request for candidates was issued on April 15, 2000. We do not expect to receive the fiscal year 2001 candidates before July 2000. Those bridge projects on the Interstate system costing over $10 million and ready for construction within one year of the allocation are eligible for Interstate Maintenance discretionary funds which is indicated on the lists for the appropriate projects. Discretionary bridge applications do not contain the information necessary for us to make a determination of eligibility for public lands discretionary or the corridors/borders discretionary programs.

DISCRETIONARY BRIDGE PROGRAM FOR FISCAL YEAR 2000 FUNDING

[Seismic Retrofit Candidates]

State	Project	Comments
California	Golden Gate Bridge	Funded with fiscal year 2000 DBP funds.
Tennessee and Arkansas	Hernando Desoto Bridge	Funded with fiscal year 2000 DBP funds. Also eligible for IM discretionary.
Washington	Spokane Street Over-crossing	Meets rating factor criteria (RF=40.7), but did not meet eligibility criteria (a 4th quarter project) for funding in fiscal year 2000.

Only two candidates submitted for fiscal year 2000 funds are well-qualified according to the eligibility criteria. The Golden Gate Bridge and the Hernando Desoto Bridge are continuing projects and have received seismic retrofit discretionary funds in previous years. The Hernando Desoto Bridge is in the New Madrid Fault region.

DISCRETIONARY BRIDGE PROGRAM FOR FISCAL YEAR 2000 FUNDING

[Non-Seismic Candidates]

State	Project	Comments
Continuing Projects (Partially funded in previous years):		
Michigan	Dequindre Yard	Funded with fiscal year 2000 DBP funds. Also eligible for IM discretionary.
Missouri	Chouteau Bridge	Funded with fiscal year 2000 DBP funds.
Tennessee	Loudon City Memorial	Funded with fiscal year 2000 DBP funds.
Washington	Snohomish River Br	Funded with fiscal year 2000 DBP funds.
South Carolina	Grace Memorial Bridge	Did not meet eligibility criteria (4th quarter project) for funding in fiscal year 2000.
Olympic Cities Projects:		
Utah	Kimballs Jct. Bridge	Not funded in fiscal year 2000—unfavorable rating factor and therefore low benefit to cost ratio. Also eligible for IM discretionary.
Utah	Silver Creek Jct. Bridge	Not funded in fiscal year 2000—unfavorable rating factor and therefore low benefit to cost ratio. Also eligible for IM discretionary.
Other Non-seismic Projects:		
New Mexico	I–25/I–40 Interchange	Funded with fiscal year 2000 DBP funds. Also eligible for IM discretionary.
Illinois	Wacker Drive Viaduct	Funded with fiscal year 2000 DBP funds.

DISCRETIONARY BRIDGE PROGRAM FOR FISCAL YEAR 2000 FUNDING—Continued

[Non-Seismic Candidates]

State	Project	Comments
Kansas	Turner Diagonal Bridge	Earmarked in H.R. 2084 Conference Report and funded with fiscal year 2000 DBP funds.
West Virginia	Williamstown-Marietta Bridge	Earmarked in H.R. 2084 Conference Report and funded with fiscal year 2000 DBP funds. Also eligible for IM discretionary.
New York	North Grand Island Bridge	[1] Eligible-not funded.
Minnesota	Ford Bridge	[1] Eligible-not funded.
New York	Stutson Street Bridge	[1] Eligible-not funded.
Michigan	Grand Rapids (R07)	[1] Eligible-not funded.
New Hampshire & Vermont.	Rt. 9 over Connecticut Riv	[1] Eligible-not funded.
Rhode Island	Washington Br. Over Seekonk River	[1] Eligible-not funded. Also eligible for IM discretionary.
Michigan	Grand Rapids (R06–1)	[1] Eligible-not funded.
Michigan	Grand Rapids (R06–2)	[1] Eligible-not funded.
Texas	Sabine River Bridge	[1] Eligible-not funded. Also eligible for IM discretionary.
New York	Ridge Rd. over Railroads	[1] Eligible-not funded.
Mississippi	Jourdan River Bridge	[1] Eligible-not funded. Also eligible for IM discretionary.
Massachusetts	Hadley Bridge (Calvin Coolidge Mem. Br.)	[1] Eligible-not funded.
West Virginia	Star City Bridge	[1] Eligible-not funded.
Massachusetts	Fall River Bridge	[1] Eligible-not funded.
New York	Marcy Ave. Ramp	[1] Eligible-not funded.
New York	Manhattan Bridge	Eligible-not funded.
Mississippi	Pascagoula River Bridge	[1] Eligible-not funded.
Missouri	Lexington-Missouri Riv. Br	[1] Eligible-not funded.
Massachusetts	Fitchburg Bridge	[1] Eligible-not funded.
Alaska	Kenai River Bridge	[1] Eligible-not funded.
Texas	Trinity River Bridge	[1] Eligible-not funded.
Alabama	Clement C. Clay	Did not meet eligibility criteria (4th quarter project) for funding in fiscal year 2000.
Florida	Royal Park Bridge	Did not meet eligibility criteria (4th quarter project) for funding in fiscal year 2000.
Kentucky	Burnside-Monticello Bridge	Did not meet eligibility criteria (4th quarter project) for funding in fiscal year 2000.
Maryland	Woodrow Wilson Bridge	Did not meet eligibility criteria (4th quarter project) for funding in fiscal year 2000.

[1] These projects were eligible for funding, but because of the limited amount of discretionary bridge program funds available for non-seismic projects ($75 million less obligation limitation), they were not selected for funding.

Seven other projects were submitted by States but are not shown because the bridges were not eligible for various reasons—bridges not deficient, rating factor greater than 100, or not a highway bridge.

Nine projects were earmarked in the Conference Report H.R. 2084. Two were funded as shown above, but seven others were not because they did not meet program eligibility criteria.

RABA TRANSFERS

Question. Please provide a revised version of the tables starting on page II–15 of the Federal Highway budget justification to reflect the levels for each line without the Administration's proposed transfers from RABA and within the original program without exempting any activity from the proportionate obligation limitation restriction necessitated by the TEA–21 legislation's levels.

Answer.

FEDERAL-AID HIGHWAYS ESTIMATED OBLIGATIONS

[In millions of dollars]

Programs	Fiscal years—		
	1999 actual	2000 estimate	2001 estimate (current law)
Subject to limitation:			
Surface transportation program	6,227	6,216	6,726
National highway system	4,888	5,319	5,757
Interstate maintenance	3,357	4,419	4,785
Bridge program	2,565	3,785	4,102
Congestion mitigation and air quality improvement	1,145	1,509	1,635
Minimum guarantee	2,167	1,763	2,000
Safety incentive grants for use of seat belts	54	80	99
Safety incentive to prevent operation of motor carrier by intoxicated persons	43	70	79
ITS standards, research and development	75	98	97
ITS deployment	71	124	114
Transportation research	208	220	216
Federal lands highways	339	653	673
National corridor planning and coordinated border infrastructure	118	122	136
Administration	331	304	316
Other programs	2,162	432	582
High priority projects	581	1,560	1,631
Woodrow Wilson memorial bridge	1	139	194
Transportation infrastructure finance and innovation	48	101	107
Appalachian development highway system	319	394	388
Emergency Relief	.....	.....	9
Motor Carrier Safety Administration	.....	.....	16
Total subject to obligation limitation	24,700	[1] 27,308	[2] 29,662
Emergency relief program	129	111	100
Minimum allocation/guarantee	858	702	664
Demonstration projects	248	394	275
Total exempt programs	1,234	1,207	1,039
Emergency relief supplemental	97	15	.....
Grand Total, Federal-aid highways (direct)	26,031	28,530	30,701

[1] Reflects estimated obligation which is less than the adjusted obligation limitation.
[2] At this level of obligation limitation, an estimated $29.677 billion will be obligated

MISSISSIPPI DELTA

Question. On page 763 of the budget appendix, on line 00.34, $23 million is requested for the Delta initiative. On page 765 of the budget appendix, under the RABA write-up, a $48 million Mississippi Delta initiative is noted. Please provide a comparison of these two initiatives and provide details as to the anticipated uses of the funds requested for these initiatives. Is any of the requested money slated for a particular project or community?

Answer. A total of $48 million is requested within highway program funding for the Mississippi Delta initiative. Of this, $25 million would be used for I–69 and the Great River Bridge.

INTELLIGENT TRANSPORTATION SYSTEM

Question. Please restructure the fiscal year 2001 request to comport only with last year's appropriations report and TEA–21 and submit all spending allocation tables.

Answer. With the exception of the Mainstreaming line item included in the fiscal year 2000 Conference Report; the fiscal year 2001 budget request contains the exact line items as included in the Conference Report. The costs of exhibits, printing and publications, which constitutes the Mainstreaming line item, have been included in the various program line items in the fiscal year 2001 budget request.

All spending allocation tables are included as part of the response to the next question.

Question. In addition, please submit for fiscal year 1999 and fiscal year 2000 comparable spending allocation tables to those for the fiscal year 2001 requests, as displayed on tab 4, pages 1–5 of the fiscal year 2001 Budget Justification. Please describe how program continuity is ensured.

Answer. Attached are spending allocation tables for fiscal years 1999 and 2000. We ensure program continuity by diligently comparing the projects and various budget request program areas to overall ITS program objectives and performance plans and then assuring that spending plan allocations are in line with programs and projects as included in our various budget requests. You will note that, historically, the ITS program has maintained a structure of funding which has remained relatively constant over the years, with changes only being made to accommodate additional legislative and/or program requirements. These processes assure program continuity.

FISCAL YEAR 1999 SPENDING PLAN FUNDING SOURCES AND BALANCES

[In thousands of dollars]

Activity/project	Fiscal year 1999	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
RESEARCH AND DEVELOPMENT	35,976	1,347	30	37,353	36,314	1,039
TRAFFIC MANAGEMENT AND CONTROL	4,637	1,001	30	5,668	5,654	14
Advanced Traffic Mgmt. Research	265	375	.....	640	640	.....
Adaptive Control System	265	375	.....	640	640	.....
Chicago Evaluation	15	.....	.....	15	15	.....
Ramp Metering	250	375	.....	625	625	.....
Models	3,410	625	30	4,065	4,065	.....
TReL	2,030	.....	30	2,060	2,060	.....
DES	1,310	.....	.....	1,310	1,310	.....
Onsite Support	720	.....	30	750	750	.....
TSIS—Enhancement and Maintenance	850	.....	.....	850	850	.....
TRANSIM	.....	500	.....	500	500	.....
Dynamic Traffic Assignment (DTA) System	150	125	.....	275	275	.....
Lab Evaluation	150	.....	.....	150	150	.....
Site Testing	.....	125	.....	125	125	.....
Computer Aided Design for Traffic Management Centers	380	.....	.....	380	380	.....
ITS Deployment Analysis System (IDAS)	450	.....	.....	450	450	.....
Other	512	1	.....	513	499	14
ATMS Research Support Services	298	.....	.....	298	298	.....
Capacity and Level of Service	50	.....	.....	50	50	.....
Websites	8	.....	.....	8	8	.....
ATMS Models Workshop	5	.....	.....	5	5	.....
Stand Alone Prediction Model	35	.....	.....	35	35	.....
Support Services for FHWA Human Factors	200	.....	.....	200	200	.....
Publications	84	.....	.....	84	84	.....
Turner-Fairbank Technical Support	65	.....	.....	65	65	.....
Other	24	1	.....	25	25	.....
IPA—Rudy Persaud, South Dakota DOT	40	.....	.....	40	26	14
INTELLIGENT VEHICLE RESEARCH	20,924	1	.....	20,925	20,431	494
Generation 0	8,859	.....	.....	8,859	8,859	.....
Performance Specifications	1,650	.....	.....	1,650	1,650	.....
Objective Test Metrics	.....	.....	.....	.....	.....	.....
Driver Performance Data Collection Field Tests	1,650	.....	.....	1,650	1,650	.....
Generation 0 Field Tests	6,400	.....	.....	6,400	6,400	.....
Generation 0 Field Tests	6,000	.....	.....	6,000	6,000	.....
Evaluations—0 Field Tests	400	.....	.....	400	400	.....

FISCAL YEAR 1999 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 1999	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Cross-Cutting	809	.....	.....	809	809	.....
Special Vehicle Needs Assessment	309	.....	.....	309	309	.....
Develop C/B Methodology	500	.....	.....	500	500	.....
Generation 1	9,499	.....	.....	9,499	9,499	.....
Performance Specifications	3,549	.....	.....	3,549	3,549	.....
Rear-end Performance Specifications	601	.....	.....	601	601	.....
Roadway Departure Performance Specifications	250	.....	.....	250	250	.....
Lane Change/Merge Performance Specifications	150	.....	.....	150	150	.....
Int. and Fleet Test of Safety Critical Systems	600	.....	.....	600	600	.....
Drowsy Driver DVI	100	.....	.....	100	100	.....
EBS	150	.....	.....	150	150	.....
Test Multi Trailer Stability—Reaward Amp. Suppression Sys	498	.....	.....	498	498	.....
Transit LC/M Performance Specifications	300	.....	.....	300	300	.....
Transit Rear End Performance Specifications	550	.....	.....	550	550	.....
Transit Rear Impact Performance Specifications	350	.....	.....	350	350	.....
Field Tests	5,550	.....	.....	5,550	5,550	.....
Rear-end CAS Field Test	4,850	.....	.....	4,850	4,850	.....
Drowsy Driver Field Test (NHTSA)	600	.....	.....	600	600	.....
Drowsy Driver Field Test (MCS)	100	.....	.....	100	100	.....
Cross-Cutting	400	.....	.....	400	400	.....
Lane Change Workshop	150	.....	.....	150	150	.....
HF Multi System Integration	250	.....	.....	250	250	.....
Generation 2	499	.....	.....	499	499	.....
Performance Specifications	250	.....	.....	250	250	.....
Vision Enhancement Performance Specifications	.....	.....	.....	.....	.....	.....
Intersection Performance Specifications	250	.....	.....	250	250	.....
Cross-Cutting	249	.....	.....	249	249	.....
Sensor Friendly Roadway	249	.....	.....	249	249	.....
Support	2,066	1	.....	2,067	1,573	494
TRB Review	175	.....	.....	175	175	.....
Program Support (Incl. Mitretek)	494	.....	.....	494	.....	494
NHTSA Support	400	.....	.....	400	400	.....
Transit Support	150	.....	.....	150	150	.....
Human Factors Support	367	1	.....	368	368	.....
Turner-Fairbank Technical Support	88	.....	.....	88	88	.....
ITS America	87	.....	.....	87	87	.....
Publications	305	.....	.....	305	305	.....
AHS Lessons Learned	.....	.....	.....	.....	.....	.....
Adjustments Required	.....	.....	.....	.....	.....	.....
RURAL RESEARCH	985	122	.....	1,107	610	497
Rural ITS Support	407	119	.....	526	526	.....
Decision Support Systems	.....	.....	.....	.....	.....	.....
Rural Conference	30	.....	.....	30	30	.....
Peer-to-Peer	.....	.....	.....	.....	.....	.....
Publications, etc	.....	.....	.....	.....	.....	.....
Turner-Fairbank Technical Support	44	.....	.....	44	44	.....
Rural Weather Show	.....	3	.....	3	3	.....
Manassas Intersection Coll. Warning Sys	7	.....	.....	7	7	.....
Rural PR's for No Cost Contract Modifications	.....	.....	.....	.....	.....	.....
Rural/Weather Requirements	497	.....	.....	497	.....	497
APTS RESEARCH	988	.....	.....	988	988	.....
Advanced Fleet Management Research	400	.....	.....	400	400	.....

FISCAL YEAR 1999 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 1999	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Traveler Information & ADA Compatibility	180	.....	.....	180	180	.....
Welfare to Work (Planning)	200	.....	.....	200	200	.....
General and Technical Staff Support	200	.....	.....	200	200	.....
Publications	8	.....	.....	8	8	.....
COMMERCIAL VEHICLE OPERATIONS	7,192	100	.....	7,292	7,268	24
Safety Data Systems (Includes 3rd Mailbox)	3,005	.....	.....	3,005	3,005	.....
CVISN Support for Level 1 Deployment	1,600	.....	.....	1,600	1,600	.....
Architecture Consistency	1,000	100	.....	1,100	1,100	.....
Architecture Consistency (Other)	800	.....	.....	800	800	.....
Freight Arch. Consistency	200	100	.....	300	300	.....
CVO Technical Assistance	500	.....	.....	500	476	24
CVO Technical Assistance—(Other)	350	.....	.....	350	326	24
CVO Technical Assistance—Freight	150	.....	.....	150	150	.....
CVISN Technical Training	998	.....	.....	998	998	.....
Publications	89	.....	.....	89	89	.....
INTERMODAL FREIGHT RESEARCH	500	10	.....	510	500	10
Operational Test—Facilitate Movement of Intermodal Freight	500	.....	.....	500	500	.....
TRB Conference on Intermodal Freight	.....	10	.....	10	.....	10
ENABLING RESEARCH	600	114	.....	714	714	.....
DSRC Spectrum Issues	450	58	.....	508	508	.....
Spectrum Consulting Services	150	50	.....	200	200	.....
Publications	.....	1	.....	1	1	.....
State & Local Use of GPS	.....	5	.....	5	5	.....
FREIGHT RESEARCH	150	.....	.....	150	150	.....
OPERATIONAL TESTS	7,080	2,089	724	9,894	5,040	4,854
APTS OPERATIONAL TESTS	1,000	.....	.....	1,000	1,000	.....
Electronic Payment System for Transit & Other App	1,000	.....	.....	1,000	1,000	.....
CVO OPERATIONAL TESTS	2,000	1,000	.....	3,000	2,890	110
CVISN Pilots	2,000	1,000	.....	3,000	2,890	110
RURAL OPERATIONAL TESTS	2,289	361	.....	2,650	1,150	1,500
National Park Service Field Operational Test	639	361	.....	1,000	.....	1,000
Emergency Services Field Operational Test	650	.....	.....	650	650	.....
Rural Transit Coordination Field Operational Test	500	.....	.....	500	500	.....
Multistate Traveler Information	500	.....	.....	500	.....	500
OPERATIONAL TESTS CONTINGENCIES	1,791	728	724	3,244	.....	3,244
EVALUATION/PROGRAM ASSESSMENT	5,510	634	.....	6,145	6,145	.....
EVALUATIONS	3,558	634	.....	4,192	4,192	.....
MMDI	626	17	.....	643	643	.....
CVISN	500	.....	.....	500	500	.....
FOT Crosscutting Analyses	567	483	.....	1,050	1,050	.....
Rural FOT's	805	.....	.....	805	805	.....
Intermodal Freight Evaluation	150	.....	.....	150	150	.....
APTS Field Operational Test Evaluations	200	.....	.....	200	200	.....
APTS Field Operational Test Evaluations	160	.....	.....	160	160	.....
APTS Operational Tests Evaluations (FTA)	40	.....	.....	40	40	.....
Highway-Rail Evaluations	100	.....	.....	100	100	.....
ADUS Support	200	75	.....	275	275	.....
Publications	.....	59	.....	59	59	.....
JPL Support	410	.....	.....	410	410	.....
PROGRAM ASSESSMENT	1,952	.....	.....	1,952	1,952	.....
ITS Deployment Tracking	755	.....	.....	755	755	.....
Metro	650	.....	.....	650	650	.....
Rural	.....	.....	.....	.....	.....	.....
CVISN Deployment Tracking	105	.....	.....	105	105	.....
JPL Support—Program Tracking	50	.....	.....	50	50	.....
ITS Policy Assessment	1,147	.....	.....	1,147	1,147	.....
Volpe Support to Assessment	880	.....	.....	880	880	.....
MMDI Expectations & Final Report	300	.....	.....	300	300	.....
ATIS Conference	100	.....	.....	100	100	.....

FISCAL YEAR 1999 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 1999	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
CVISN Institutional Issues Final Repo	50	.....	.....	50	50	.....
Review CVISN Business Practices	100	.....	.....	100	100	.....
MMDI Customer Satisfaction Guidance	50	.....	.....	50	50	.....
Analytical Support for Metropolitan Tracking	50	.....	.....	50	50	.....
Volpe B/C of MMDI	230	.....	.....	230	230	.....
Evaluation Guidelines Support	.....	.....	.....	.....	.....	.....
Volpe Support to Director JPO	267	.....	.....	267	267	.....
National Program Plan	155	.....	.....	155	155	.....
General Policy Support	.....	.....	.....	.....	.....	.....
ALERT	50	.....	.....	50	50	.....
SENTRI	62	.....	.....	62	62	.....
ARCHITECTURE AND STANDARDS	14,429	23	.....	14,452	13,702	750
ARCHITECTURE	5,630	23	.....	5,653	5,533	120
Architecture Deployment/Implementation Support	2,825	23	.....	2,848	2,848	.....
Deployment/Implementation Support	800	.....	.....	800	800	.....
Architecture Standards Development Support	800	.....	.....	800	800	.....
Architecture Data Base/Configuration Control Support	500	.....	.....	500	500	.....
Architecture Documentation (CD ROM/Web/Doc/Printing)	98	.....	.....	98	98	.....
Architecture Tool Development (Turbo Architecture)	377	23	.....	400	400	.....
Architecture Consistency Support	250	.....	.....	250	250	.....
Rural User Service Architecture Development Efforts	400	.....	.....	400	400	.....
Planning Data/Archiving Architecture Changes	399	.....	.....	399	399	.....
Architecture Eng. Maint. Support	285	.....	.....	285	285	.....
Architecture Training (Deployment and Implementation Tng.)	926	.....	.....	926	926	.....
CVO Architecture	675	.....	.....	675	675	.....
CVO Architecture—Other	375	.....	.....	375	375	.....
CVO Architecture—Freight	300	.....	.....	300	300	.....
Publications	.....	1	.....	1	1	.....
Turbo Architecture	120	.....	.....	120	.....	120
STANDARDS	8,799	.....	.....	8,799	8,169	630
Research and Development	594	.....	.....	594	594	.....
In-vehicle ICON	594	.....	.....	594	594	.....
STANDARDS DEVELOPMENT	4,150	.....	.....	4,150	4,020	130
Infrastructure and Safety	1,290	.....	.....	1,290	1,290	.....
Infrastructure and Safety	1,190	.....	.....	1,190	1,190	.....
Standards Strategic Plan	100	.....	.....	100	100	.....
CVO (EDI)	500	.....	.....	500	500	.....
Transit	1,200	.....	.....	1,200	1,200	.....
ISO TC 204 WG 8 Support via Volpe	150	.....	.....	150	150	.....
Multi-Use Smart Card Guidelines/Specs	300	.....	.....	300	300	.....
Other Transit Standards	550	.....	.....	550	550	.....
Transit Standards Consortium to TSC	200	.....	.....	200	200	.....
Rail Standards Development	200	.....	.....	200	70	130
Architectural Support	200	.....	.....	200	200	.....
JPL	760	.....	.....	760	760	.....
TESTING AND INTEROPERABILITY	2,300	.....	.....	2,300	2,300	.....
Interoperability Testing Support	1,800	.....	.....	1,800	1,800	.....
Data Registration	500	.....	.....	500	500	.....
IMPLEMENTATION	1,255	.....	.....	1,255	1,255	.....
Resource Materials	670	.....	.....	670	670	.....
Lessons Learned	300	.....	.....	300	300	.....
Evaluation of Standards Implementation	285	.....	.....	285	285	.....
STANDARDS CONTINGENCIES	500	.....	.....	500	.....	500

FISCAL YEAR 1999 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 1999	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
INTEGRATION	5,676	925	681	7,282	5,325	1,957
TECHNICAL ASSISTANCE	2,950	142	456	3,548	2,516	1,032
Information and Technology Transfer	1,358	142	65	1,565	1,566	.....
Specifications and Contract Management	100	.....	.....	100	100	.....
Work Program Scoping Effort	.....	.....	.....	.....	.....	.....
S&C Management Product Development	100	.....	.....	100	100	.....
Tailored Technical Assistance	800	50	.....	850	850	.....
Peer-to-Peer	.....	50	.....	50	50	.....
Service Plan Support	800	.....	.....	800	800	.....
Service Plan Support—Transfer to Resource Centers	696	.....	.....	696	696	.....
Other Service Plan Projects (NHI Training Courses)	104	.....	.....	104	104	.....
DTAG, RTAG, APTS Stakeholders	100	.....	.....	100	100	.....
FTA—DTAG, RTAG< APTS Stakeholders	100	.....	.....	100	100	.....
Quick Response	8	.....	.....	8	8	.....
Contracts Support	70	.....	.....	70	70	.....
Concept of Operation for TMC's (A Cook book)	100	.....	.....	100	100	.....
Case Studies	180	.....	.....	180	180	.....
Technology for Surveillance and Detection	120	.....	.....	120	120	.....
ITS Work Zone Applications	60	.....	.....	60	60	.....
Morgan Room Support	.....	92	45	137	137	.....
GMC ITS Priority Corridor Information Clearinghouse	.....	.....	20	20	20	.....
Transit Technical Assistance	950	.....	.....	950	950	.....
Technical Asst. to Transit Authorities	225	.....	.....	225	225	.....
Peer-to-Peer Program Support	125	.....	.....	125	125	.....
ITSA APTS Info. Exchange & Program Development	100	.....	.....	100	100	.....
APTS Mobile Showcase	500	.....	.....	500	500	.....
Systems Engineering Guidance Documents	100	.....	.....	100	.....	100
P.B. Farradyne IQC	.....	.....	391	391	.....	391
PTI Earmark	442	.....	.....	442	.....	442
AASHTO Steering Group for Technology Deployment	100	.....	.....	100	.....	100
PLANNING/POLICY	450	.....	.....	450	350	100
Management and Operations in Planning	350	.....	.....	350	350	.....
Management & Operations Product Development	350	.....	.....	350	350	.....
Traveler Response to Advanced Travel Information	100	.....	.....	100	.....	100
FHWA—Traveler Response to Advanced Travel Information	50	.....	.....	50	.....	50
FTA—Traveler Response to Advanced Travel Information	50	.....	.....	50	.....	50
TRAINING	1,559	747	225	2,531	1,931	600
Delivery	615	735	225	1,575	1,450	125
ITS Software Acquisition	40	.....	.....	40	30	10
Lessons in Procurement	.....	.....	225	225	225	.....
CORSIM	15	.....	.....	15	.....	15
Continuation of Existing Courses	160	.....	.....	160	160	.....
Delivery of Materials	.....	35	.....	35	35	.....
Standards (NTCIP, TCIP)	.....	700	.....	700	700	.....
Standards (NTCIP, TCIP)—FHWA	.....	384	.....	384	384	.....
Standards (NTCIP–TCIP)—FTA	.....	316	.....	316	316	.....
Distance Learning Pilots	350	.....	.....	350	300	50

FISCAL YEAR 1999 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 1999	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Architecture Training Course (Field Travel, etc.)	50	.....	.....	50	.....	50
New Course Development	500	.....	.....	500	300	200
FHWA—New Course Development	200	.....	.....	200	.....	200
FTA—New Course Development	300	.....	.....	300	300	.....
Update Existing Materials	33	12	.....	45	45	.....
Update Existing Materials—FHWA	23	12	.....	35	35	.....
Update Existing Material—Transfer to FTA	10	.....	.....	10	10	.....
Support at NHI	161	.....	.....	161	136	25
Consultant Management	250	.....	.....	250	.....	250
OUTREACH AND COMMUNICATIONS	717	37	.....	754	528	225
Shipping and Handling Exhibits	117	17	.....	134	134	.....
New Exhibit Development	125	.....	.....	125	125	.....
National Associations Working Group (NAWG)	150	20	.....	170	170	.....
National Governors' Association Initiative	100	.....	.....	100	100	.....
JPO Web-Based Activities	225	.....	.....	225	.....	225
ITS Cooperative Deployment Network	225	.....	.....	225	.....	225
PROGRAM SUPPORT	8,566	674	226	9,465	5,494	3,971
ITS AMERICA	2,777	.....	.....	2,777	2,775	2
ITS AMERICA—Regular Contract	2,500	.....	.....	2,500	2,500	.....
Development of a Strategic Plan—ITS America	247	.....	.....	247	247	.....
ITSA Annual Meeting (Registration Fees)	30	.....	.....	30	27	3
MITRETEK	4,970	530	217	5,717	1,811	3,906
JPL SUPPORT	380	.....	.....	380	380	.....
MISCELLANEOUS TECHNICAL SUPPORT	86	.....	.....	86	86	.....
Kan Chen	11	.....	.....	11	11	.....
MITRE (Chadwick)	75	.....	.....	75	75	.....
GENERAL PROGRAM SUPPORT	352	144	9	505	442	63
C&P Contractual Support	150	.....	.....	150	150	.....
Columbia Services Computer Support	28	.....	.....	28	28	.....
Arrowhead Industries	96	.....	.....	96	96	.....
Other Misc. Program Support	33	81	9	123	123	.....
FCC Shared Resources	45	.....	.....	45	45	.....
TASC—Traveler Information Center	.....	35	.....	35	.....	35
Unfunded Interest Payments	.....	28	.....	28	.....	28
ITS DEPLOYMENT INCENTIVES	92,715	2,610	3,522	98,847	71,929	26,918
FISCAL YEAR 1998 CONGRESSIONAL EARMARKS	.....	2,610	3,522	6,132	3,563	2,569
Northeast Corridor	.....	110	3,522	3,632	2,563	1,069
Commercial Vehicle Operations, I–5 California	.....	1,500	.....	1,500	.....	1,500
Dade County Expressway, Florida Toll Collection System	.....	1,000	.....	1,000	1,000	.....
Rennselaer Polytechnical Institute (RPI)	.....	.....	.....	.....	.....	.....
FISCAL YEAR 1999 CONGRESSIONAL EARMARKS—TEA–21	7,802	.....	.....	7,802	7,052	750
Great Lakes ITS Implementation	1,583	.....	.....	1,583	1,583	.....
Northeast ITS Implementation	3,957	.....	.....	3,957	3,207	750
Hazardous Materials Monitoring Systems	1,211	.....	.....	1,211	1,211	.....
Translink—Texas Transportation Institute	1,050	.....	.....	1,050	1,050	.....
FISCAL YEAR 1999 CONGRESSIONAL EARMARKS—APPNS	83,104	.....	.....	83,104	59,505	23,599
Amherst, Massachusetts	791	.....	.....	791	.....	791
Arlington County, Virginia	594	.....	.....	594	594	.....
Atlanta, Georgia	1,583	.....	.....	1,583	1,583	.....
Brandon, Vermont	297	.....	.....	297	297	.....
Buffalo, New York	396	.....	.....	396	396	.....
Centre Valley, Pennsylvania	396	.....	.....	396	.....	396
Cleveland, Ohio	791	.....	.....	791	791	.....
Columbus, Ohio	791	.....	.....	791	791	.....
Corpus Christi, Texas	712	.....	.....	712	712	.....
Dade County, Florida	791	.....	.....	791	.....	791
Del Rio, Texas	791	.....	.....	791	791	.....

FISCAL YEAR 1999 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 1999	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Delaware River, Pennsylvania	791	.....	.....	791	.....	791
Fairfield, California	791	.....	.....	791	791	.....
Fitchburg, Massachusetts	396	.....	.....	396	396	.....
Greater Metro. Region—DC	3,957	.....	.....	3,957	3,957	.....
Hammond, Louisiana	3,166	.....	.....	3,166	.....	3,166
Houston, Texas	1,583	.....	.....	1,583	1,583	.....
Huntington Beach, California	791	.....	.....	791	791	.....
Huntsville, Alabama	791	.....	.....	791	791	.....
Inglewood, California	1,187	.....	.....	1,187	1,187	.....
Jackson, Mississippi	791	.....	.....	791	791	.....
Kansas City, Missouri	396	.....	.....	396	396	.....
Laredo, Texas	791	.....	.....	791	791	.....
Middlesboro, Kentucky	2,374	.....	.....	2,374	2,374	.....
Mission Viejo, California	791	.....	.....	791	.....	791
Mobile, Alabama	1,979	.....	.....	1,979	1,979	.....
Monroe County, New York	317	.....	.....	317	317	.....
Montgomery, Alabama	989	.....	.....	989	989	.....
Nashville, Tennessee	396	.....	.....	396	396	.....
New Orleans, Louisiana	1,187	.....	.....	1,187	.....	1,187
New York City, New York	1,979	.....	.....	1,979	1,979	.....
New York/Long Island, New York	1,820	.....	.....	1,820	1,820	.....
Oakland County, Michigan	791	.....	.....	791	791	.....
Onandaga County, New York	317	.....	.....	317	.....	317
Port Angeles, Washington	396	.....	.....	396	396	.....
Raleigh-Wake County, North Carolina	1,583	.....	.....	1,583	1,583	.....
Riverside, California	791	.....	.....	791	791	.....
San Francisco, California	1,187	.....	.....	1,187	1,187	.....
Scranton, Pennsylvania	791	.....	.....	791	.....	791
Silicon Valley, California	1,187	.....	.....	1,187	1,187	.....
Spokane, Washington	356	.....	.....	356	356	.....
Springfield, Virginia	396	.....	.....	396	396	.....
St. Louis, Missouri	594	.....	.....	594	594	.....
State of Alaska	1,187	.....	.....	1,187	350	837
Alaska—CVO Deployment	350	.....	.....	350	350	.....
Alaska—Metro/Rural	837	.....	.....	837	.....	837
State of Idaho	791	.....	.....	791	791	.....
Idaho—CVO Deployment	350	.....	.....	350	350	.....
Idaho—Metro/Rural	441	.....	.....	441	441	.....
State of Maryland—CVO Deployment	1,979	.....	.....	1,979	1,979	.....
State of Minnesota	5,619	.....	.....	5,619	5,619	.....
Minnesota—CVO Deployment	1,920	.....	.....	1,920	1,920	.....
Minnesota—Metro/Rural	3,699	.....	.....	3,699	3,699	.....
State of Mississippi	791	.....	.....	791	791	.....
Mississippi—CVO Deployment	350	.....	.....	350	350	.....
Mississippi—Metro/Rural	441	.....	.....	441	441	.....
State of Missouri	396	.....	.....	396	396	.....
Missouri—CVO Deployment	350	.....	.....	350	350	.....
Missouri—Metro/Rural	46	.....	.....	46	46	.....
State of Montana	554	.....	.....	554	554	.....
Montana—CVO Deployment	554	.....	.....	554	554	.....
Montana—Metro/Rural	.....	.....	.....	.....	.....	.....
State of Nevada	455	.....	.....	455	105	350
Nevada—CVO Deployment	350	.....	.....	350	.....	350
Nevada—Metro/Rural	105	.....	.....	105	105	.....
State of New Jersey	2,374	.....	.....	2,374	2,374	.....
New Jersey—CVO Deployment	350	.....	.....	350	350	.....
New Jersey—Metro/Rural	2,024	.....	.....	2,024	2,024	.....
State of New Mexico	791	.....	.....	791	791	.....
New Mexico—CVO Deployment	741	.....	.....	741	741	.....
New Mexico—Metro/Rural	50	.....	.....	50	50	.....
State of New York	1,979	.....	.....	1,979	1,312	667

FISCAL YEAR 1999 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 1999	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
New York—CVO Deployment	1,730	.....	.....	1,730	1,063	667
New York—Metro/Rural	249	.....	.....	249	249	.....
State of North Dakota	1,148	.....	.....	1,148	297	851
North Dakota—CVO Deployment	50	.....	.....	50	50	.....
North Dakota—Metro/Rural	1,098	.....	.....	1,098	247	851
North Dakota State University (ATAC)	247	.....	.....	247	247	.....
North Dakota State Univ.—ATAC	302	.....	.....	302	.....	302
Univ. of North Dakota—ATWIS	549	.....	.....	549	.....	549
Commonwealth of Pennsylvania	11,081	.....	.....	11,081	.....	11,081
CVO Deployment	350	.....	.....	350	.....	350
Metro/Rural	10,731	.....	.....	10,731	.....	10,731
State of Texas	791	.....	.....	791	791	.....
Texas—CVO Deployment	50	.....	.....	50	50	.....
Texas—Metro/Rural	741	.....	.....	741	741	.....
State of Utah	2,849	.....	.....	2,849	2,849	.....
Utah—CVO Deployment	200	.....	.....	200	200	.....
Utah—Metro/Rural	2,649	.....	.....	2,649	2,649	.....
State of Washington	1,583	.....	.....	1,583	1,583	.....
Washington—CVO Deployment	610	.....	.....	610	610	.....
Washington—Metro/Rural	973	.....	.....	973	973	.....
State of Wisconsin	1,187	.....	.....	1,187	1,187	.....
Wisconsin—CVO Deployment	350	.....	.....	350	350	.....
Wisconsin—Metro/Rural	837	.....	.....	837	837	.....
Temucula, California	198	.....	.....	198	198	.....
Tucson, Arizona	791	.....	.....	791	791	.....
Volusia County, Florida	791	.....	.....	791	.....	791
Warren County, Virginia	198	.....	.....	198	198	.....
Wausau-Stevens Point, Wisconsin	791	.....	.....	791	791	.....
Westchester/Putnam Counties, New York	396	.....	.....	396	396	.....
White Plains, New York	791	.....	.....	791	791	.....
EVALUATIONS OF EARMARKED PROJECTS	1,809	.....	.....	1,809	1,809	.....
NATIONAL ADVANCED DRIVER SIMULATOR	6,648	.....	.....	6,648	6,648	.....
GRAND TOTALS	176,600	8,303	5,183	190,086	150,596	39,489

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
RESEARCH AND DEVELOPMENT	40,901	1,149	.....	42,049	3,869	38,180
TRAFFIC MANAGEMENT AND CONTROL	6,200	14	.....	6,214	1,439	4,775
Dynamic Traffic Assignment (DTA) System	1,900	.....	.....	1,900	.....	1,900
Adaptive Control Systems Lite	250	.....	.....	250	.....	250
Pedestrian Detection	100	.....	.....	100	.....	100
Models	1,525	.....	.....	1,525	800	725
ITS Deployment Analysis System (IDAS)	175	.....	.....	175	50	125
ITS Deployment Analysis System (IDAS) Development	50	.....	.....	50	50	.....
ITS Deployment Analysis System (IDAS) Maintenance	125	.....	.....	125	.....	125
Traffic Software Integrated System (TSIS)	1,350	.....	.....	1,350	750	600
Support for TSIS Version 5.0 Model Deployment	750	.....	.....	750	750	.....
CORSIMS Reengineering	600	.....	.....	600	.....	600

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Traffic Research Lab.(TReL) Test Bed Devel. & Supp	1,537	.....	.....	1,537	320	1,217
Human Factors	555	.....	.....	555	220	335
Human Factors Computer Aided Design (CAD) for TMC's	220	.....	.....	220	220	.....
Advanced Traffic Mgmt. Systems (ATMS) Support	100	.....	.....	100	.....	100
Traffic Mgmt. Centers (TMC) Workshop	35	.....	.....	35	.....	35
Traffic Mgmt. Centers Consortium	200	.....	.....	200	.....	200
Archived Data User Service (ADUS) Case Studies	100	.....	.....	100	25	75
Other Research Items	233	14	.....	247	74	173
Ramp Metering (split funding)	43	.....	.....	43	43	.....
McTrans Beta Testing	50	.....	.....	50	.....	50
McTrans Reengineering Review	50	.....	.....	50	.....	50
Freeway Capacity	35	.....	.....	35	31	4
ITRAF Support	50	.....	.....	50	.....	50
Queue Measurement	5	.....	.....	5	.....	5
IPA—Rudy Persaud, South Dakota DOT	.....	14	.....	14	.....	14
INTELLIGENT VEHICLE RESEARCH	23,001	494	.....	23,495	758	22,736
Generation 0	5,500	.....	.....	5,500	.....	5,500
Generation 0 Operational Tests	4,500	.....	.....	4,500	.....	4,500
Generation 0 Field Test Evaluations	1,000	.....	.....	1,000	.....	1,000
Generation 1	10,335	.....	.....	10,335	.....	10,335
Rear-end Collision Avoidance System Field Test	4,250	.....	.....	4,250	.....	4,250
Rear-end Collision Avoidance System	1,400	.....	.....	1,400	.....	1,400
Rear-end Collision Avoidance System Test (NHTSA)	900	.....	.....	900	.....	900
Rear-end Collision Avoidance System Test (FHWA for NHTSA)	500	.....	.....	500	.....	500
Lane Change/Merge Collision Avoidance System	850	.....	.....	850	.....	850
Road Departure	2,250	.....	.....	2,250	.....	2,250
Road Departure Test (NHTSA)	1,750	.....	.....	1,750	.....	1,750
Road Departure Test (FHWA for NHTSA)	500	.....	.....	500	.....	500
Safety Impacting	335	.....	.....	335	.....	335
Safety Impacting Test (NHTSA)	300	.....	.....	300	.....	300
Safety Impacting Test (FHWA for NHTSA)	35	.....	.....	35	.....	35
EBS	250	.....	.....	250	.....	250
Drowsy Driver Field Test	1,000	.....	.....	1,000	.....	1,000
Drowsy Driver Field Test (NHTSA)	750	.....	.....	750	.....	750
Drowsy Driver Field Test (CVO)	250	.....	.....	250	.....	250
Enabling Research Consortium	4,090	.....	.....	4,090	.....	4,090
Forward Collision Warning	500	.....	.....	500	.....	500
Workload Metrics	600	.....	.....	600	.....	600
ED Map	1,500	.....	.....	1,500	.....	1,500
Transit Rear-end	550	.....	.....	550	.....	550
Multiple Systems Inegration Study	940	.....	.....	940	.....	940
FHWA Human Factors Research	425	.....	.....	425	64	361
In-Vehicle Information Systems Behavioral Model	65	.....	.....	65	64	1
Effectiveness of Multi-turn Preview on Route Following Perf	5	.....	.....	5	.....	5
Comp. of Audio/Visual Icons for Sign Recognition	5	.....	.....	5	.....	5

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Societal and Institutional Issues	100	.....	.....	100	.....	100
Develop Cost/Benefit Methodology	250	.....	.....	250	.....	250
Generation 2	1,300	.....	.....	1,300	.....	1,300
Intersection	800	.....	.....	800	.....	800
Intersection (NHTSA)	300	.....	.....	300	.....	300
Intersection (FHWA for NHTSA)	500	.....	.....	500	.....	500
Sensor Friendly Roadway	300	.....	.....	300	.....	300
Define Short Range Communication Needs	100	.....	.....	100	.....	100
Define Radionavigation Needs	100	.....	.....	100	.....	100
Support	1,351	494	.....	1,845	695	1,150
Showcase	400	.....	.....	400	.....	400
TRB Review	200	.....	.....	200	200	.....
NHTSA Support	400	.....	.....	400	.....	400
Transit IVI Technical Support	100	.....	.....	100	.....	100
Human Factors Support	155	.....	.....	155	.....	155
ITS America	96	.....	.....	96	1	95
IVI Program Support	.....	494	.....	494	494	.....
RURAL RESEARCH	2,350	497	.....	2,847	497	2,350
Integration of APTS with Employment Service Sys	300	.....	.....	300	.....	300
Rural Safety Services	600	.....	.....	600	.....	600
ACN/PSAP Integration	200	.....	.....	200	.....	200
E–911 Workshop	100	.....	.....	100	.....	100
Design of Variable Speed Limit (VSL) Sys	300	.....	.....	300	.....	300
Rural Information and Operations	1,450	.....	.....	1,450	.....	1,450
Development Decision Supp. Sys for Winter Maintenance	600	.....	.....	600	.....	600
Assimilation of Surface Condition & Weather Observ	200	.....	.....	200	.....	200
Sensors and Sensor Siting	250	.....	.....	250	.....	250
Refinement of Surface Transp. Weather Requirements	300	.....	.....	300	.....	300
Rural ITS Toolbox	100	.....	.....	100	.....	100
Rural/Weather Requirements	.....	497	.....	497	497	.....
APTS RESEARCH	750	.....	.....	750	.....	750
Fleet Management Expert System	300	.....	.....	300	.....	300
Demand Response Dispatch Algorithm	250	.....	.....	250	.....	250
Wireless Technology Analysis	.....	.....	.....	.....	.....	.....
Traveler Information and ADA Compatibility	.....	.....	.....	.....	.....	.....
ITS Rail Research	200	.....	.....	200	.....	200
CVO RESEARCH	7,500	134	.....	7,634	1,165	6,469
Safety Data Systems	2,650	.....	.....	2,650	1,041	1,609
CVISN Support for Level I Deployment	1,200	.....	.....	1,200	100	1,100
Roadside Identification Technology Research	350	.....	.....	350	.....	350
Architecture Consistency	1,245	.....	.....	1,245	.....	1,245
CVO Technical Assistance (Minnesota)	.....	24	.....	24	24	.....
CVISN Pilots	2,000	110	.....	2,110	.....	2,110
Available for Distribution	55	.....	.....	55	.....	55
INTERMODAL FREIGHT RESEARCH	750	10	.....	760	10	750
Harmonizing Freight Technology	300	.....	.....	300	.....	300
ITSA Support for Reston II Conference	150	.....	.....	150	.....	150
ITSA Support for Intermodal Frt. Tech. Working Group	150	.....	.....	150	.....	150
International Border Crossing Program Support	450	.....	.....	450	.....	450

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
IBC Program Support/IBC Architecture Update	365	.....	.....	365	.....	365
Conduct 2 IBC Planning and Deploy. Mtgs	85	.....	.....	85	.....	85
TRB Conference on Intermodal Freight	.....	10	.....	10	10	.....
ENABLING RESEARCH	350	.....	.....	350	.....	350
DSRC Spectrum Issues	300	.....	.....	300	.....	300
Support for FCC and ITSA	50	.....	.....	50	.....	50
OPERATIONAL TESTS	6,090	4,744	231	11,065	400	10,665
APTS OPERATIONAL TESTS	1,090	.....	.....	1,090	.....	1,090
Fleet Management Expert System	500	.....	.....	500	.....	500
Demand Response Algorithm	590	.....	.....	590	.....	590
ALERT (Capitol Beltway)	1,000	.....	.....	1,000	.....	1,000
RURAL OPERATIONAL TESTS	3,750	1,500	.....	5,250	400	4,850
Statewide PSAP	1,000	.....	.....	1,000	.....	1,000
New York Statewide PSAP	200	.....	.....	200	.....	200
Statewide PSAP	800	.....	.....	800	.....	800
Multi-agency Integration of Info Sys & Trans. Coord	1,000	.....	.....	1,000	.....	1,000
Rural Information and Operations	1,750	500	.....	2,250	.....	2,250
Multi-State Traveler Information	1,000	500	.....	1,500	.....	1,500
Road Weather Condition Forecasting	750	.....	.....	750	.....	750
Nat'l. Park Service FOT	.....	1,000	.....	1,000	400	600
INTERMODAL FREIGHT—OPERATIONAL TEST	250	.....	.....	250	.....	250
OPERATIONAL TESTS CONTINGENCIES	.....	3,244	231	3,475	.....	3,475
EVALUATION/PROGRAM ASSESSMENT	6,000	.....	.....	6,000	1,555	4,445
EVALUATIONS	2,860	.....	.....	2,860	536	2,324
Field Operational Tests Evaluations	1,135	.....	.....	1,135	240	895
Rural FOT Evaluations	570	.....	.....	570	.....	570
Intermodal Freight Evaluations	200	.....	.....	200	.....	200
APTS Field Operational Test Evaluations	365	.....	.....	365	240	125
Transit FOT Evaluations (Transfer to FTA)	240	.....	.....	240	240	.....
Transit FOT Evaluations (FHWA for FTA)	125	.....	.....	125	.....	125
Deployment Evaluations	1,025	.....	.....	1,025	296	729
Metropolitan Evaluations	500	.....	.....	500	104	396
CVISN Evaluations	425	.....	.....	425	192	233
Hwy.-Rail Evaluations	100	.....	.....	100	.....	100
Special Benefits Reports	700	.....	.....	700	.....	700
Crosscutting Analyses	700	.....	.....	700	.....	700
ITS Deployment Tracking	950	.....	.....	950	870	80
Metropolitan ITS Deployment Tracking for Fiscal Year 2000	600	.....	.....	600	600	.....
Rural Deployment Tracking	260	.....	.....	260	260	.....
CVISN Deployment Tracking for Fiscal Year 1998	90	.....	.....	90	10	80
Program Tracking	500	.....	.....	500	.....	500
ITS Policy Assessment	1,690	.....	.....	1,690	149	1,541
Analytical Support	800	.....	.....	800	.....	800
General Policy Assessment Support to the Director	890	.....	.....	890	149	741
ARCHITECTURE AND STANDARDS	14,000	750	.....	14,750	5,573	9,177
ARCHITECTURE	5,000	120	.....	5,120	4,309	811
Architecture Deployment/Implementation Support	2,590	.....	.....	2,590	2,590	.....
Deployment/Implementation Support	1,140	.....	.....	1,140	1,140	.....
Architecture Standards Development Support	700	.....	.....	700	700	.....

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Architecture Support of Standards Testing	100	.....	.....	100	100	.....
Architecture Data Base/Configuration Control Support	500	.....	.....	500	500	.....
Architecture Documentation	100	.....	.....	100	100	.....
Architecture Tool Development	50	.....	.....	50	50	.....
Rural User Service/Architecture Changes	400	.....	.....	400	400	.....
Planning Data/Archiving User Service/Architecture Changes	100	.....	.....	100	100	.....
Weather User Service/Architecture Changes	50	.....	.....	50	50	.....
Intermodal Freight User Service/Architecture Changes	50	.....	.....	50	50	.....
Emergency Services User Services/Architecture Changes	25	.....	.....	25	25	.....
Regional Architecture Support, Peer to Peer	175	.....	.....	175	175	.....
Architecture Engineering Maintenance Support	315	.....	.....	315	.....	315
Architecture Training (Deployment and Implementation)	800	.....	.....	800	800	.....
CVO Architecture	490	.....	.....	490	.....	490
Invitational Travel—Beta Test Turbo Architecture	5	.....	.....	5	.....	5
Turbo Architecture	.....	120	.....	120	120	.....
STANDARDS	9,000	630	.....	500	1,264	8,366
Standards Development Activities	4,400	130	.....	4,530	130	4,400
Infrastructure and Safety	1,765	.....	.....	1,765	.....	1,765
Infrastructure & Safety	1,665	.....	.....	1,665	.....	1,665
Volpe	100	.....	.....	100	.....	100
CVO (EDI)	400	.....	.....	400	.....	400
Transit	1,055	.....	.....	1,055	.....	1,055
TCIP	335	.....	.....	335	.....	335
Transit Signal Priority	110	.....	.....	110	.....	110
Transit Profile for LRMS	110	.....	.....	110	.....	110
Smart Card	300	.....	.....	300	.....	300
ISO TC 204 WG 8 & WAG 8	200	.....	.....	200	.....	200
Rail	200	130	.....	330	130	200
FRA Support Devel. of Hwy.-Rail Intersection	.....	130	.....	130	130	.....
Rail	200	.....	.....	200	.....	200
Architecture Support	200	.....	.....	200	.....	200
JPL	780	.....	.....	780	.....	780
Mitretek	.....	.....	.....	.....	.....	.....
Testing and Interoperability	2,500	.....	.....	2,500	1,100	1,400
Interoperability Testing Support	1,700	.....	.....	1,700	1,100	600
Battelle	1,100	.....	.....	1,100	1,100	.....
DSRC	400	.....	.....	400	.....	400
LRS	200	.....	.....	200	.....	200
Data Registration	800	.....	.....	800	.....	800
Implementation	1,900	.....	.....	1,900	34	1,866
Resource Materials	500	.....	.....	500	34	466
Lessons Learned	500	.....	.....	500	.....	500
Technical Asst. (Peer to peer)	100	.....	.....	100	.....	100
Training	500	.....	.....	500	.....	500
Evaluation	300	.....	.....	300	.....	300
Conformity	200	.....	.....	200	.....	200
Rule Making	100	.....	.....	100	.....	100
Policy Development	100	.....	.....	100	.....	100
Standards Contingencies	.....	500	.....	500	.....	500
INTEGRATION/MAINSTREAMING	9,414	1,957	.....	11,371	1,569	9,702

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
TECHNICAL ASSISTANCE	4,766	1,032	.....	5,798	1,361	4,437
Direct Technical Assistance	1,725	.....	.....	1,725	377	1,348
Service Plan Implementation	1,500	.....	.....	1,500	377	1123
Service Plan Implementation	798	.....	.....	798	377	421
Non-Targeted Funding Allotted to Resource Centers ($312,000)	312	.....	.....	312	.....	312
Service Plan Funds Allotted to NHI	28	.....	.....	28	.....	28
Targeted Service Plan Funding Allotted to Divisions	363	.....	.....	363	.....	363
FHWA/FTA Peer to Peer Program	225	.....	.....	225	.....	225
Technical Guidance	1,855	100	.....	1,955	425	1,530
ITS Lessons Learned/Best Practices Series	400	.....	.....	400	.....	400
ITS Lessons Learned/Best Practices Series	325	.....	.....	325	.....	325
APTA Best Practices Workshops	75	.....	.....	75	.....	75
Technical Materials for Sys Eng	120	100	.....	220	100	120
APTS Showcase	960	.....	.....	960	300	660
APTS Showcase	300	.....	.....	300	300	.....
APTS Mobile Showcase (FHWA for FTA)	660	.....	.....	660	.....	660
National Architecture Use Guidelines	100	.....	.....	100	.....	100
Architecture Consistency Outreach	100	.....	.....	100	.....	100
Architecture Consistency Outreach	50	.....	.....	50	.....	50
Arch. Consistency Outreach Allotted to NHI ($50,000)	50	.....	.....	50	.....	50
ACS Outreach	100	.....	.....	100	.....	100
IDAS Outreach	75	.....	.....	75	25	50
Develop. of ATIS Data Collection Guidelines	230	.....	.....	230	194	36
Crosscutting	445	.....	.....	445	.....	445
Program Peer Review	445	.....	.....	445	.....	445
ITSA Transit	100	.....	.....	100	.....	100
APTS Stakeholder Forum	75	.....	.....	75	.....	75
TMAG	50	.....	.....	50	.....	50
FTA Technical Support	220	.....	.....	220	.....	220
AASHTO ITS Deployment Task Force	75	.....	.....	75	.....	75
URBAN CONSORTIUM	436	442	.....	877	224	653
PTI FISCAL YEAR 2000 EARMARK—URBAN CONSORTIUM	436	.....	.....	436	.....	436
PTI Fiscal Year 1999 Earmark	.....	442	.....	442	224	217
PBFarradyne IQC	.....	391	.....	391	141	250
AASHTO Steering Group for Technology Deployment	.....	100	.....	100	.....	100
PLANNING/POLICY	500	100	.....	600	.....	600
Air Quality Impacts	200	.....	.....	200	.....	200
Planning Tools to Support ITS	300	.....	.....	300	.....	300
Traveler Response to Advanced Travel Information	.....	100	.....	100	.....	100
FHWA—Traveler Response to Adv. Travel Info	.....	50	.....	50	.....	50
FTA—Traveler Response to Adv. Travel Info	.....	50	.....	50	.....	50
TRAINING	3,350	600	.....	3,950	200	3,750
Deliver Current Courses	500	.....	.....	500	30	470
Travel Management	500	.....	.....	500	30	470
Update Existing Courses	100	.....	.....	100	.....	100
Assist NHI and NTI with Continuing Update	100	.....	.....	100	.....	100

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Develop New Instructional Material	1,250	.....	.....	1,250	.....	1,250
FTA Course—Data Management for Transit Agencies	200	.....	.....	200	.....	200
New Courses to Fill Gaps	300	.....	.....	300	.....	300
Develop Addtl. High Priority Courses	750	.....	.....	750	.....	750
Advanced WBT Course Development	250	.....	.....	250	100	150
Support Detailed Curricula Development & WBT Evaluation	250	.....	.....	250	100	150
Program Management & Support	350	.....	.....	350	.....	350
Onsite ISD Professional & Onsite Secretary	100	.....	.....	100	.....	100
Professional Training Spec. for NTI/FTE	150	.....	.....	150	.....	150
Volpe Support for PCB Web Page Development	100	.....	.....	100	.....	100
CVISN Technical Training	900	.....	.....	900	20	880
Consultant Management	.....	250	.....	250	.....	250
Distance Learning Pilots	.....	50	.....	50	50	.....
Training Funds Allocated to NHI	.....	.....	.....	.....	.....	.....
NHI Training Carryover from fiscal year 1999	.....	300	.....	300	.....	300
ITS Software Acquisition	.....	10	.....	10	.....	10
CORSIM	.....	15	.....	15	.....	15
Architecture Training Course	.....	50	.....	50	.....	50
FHWA—New Course Development	.....	200	.....	200	.....	200
Support at NHI	.....	25	.....	25	.....	25
OUTREACH AND COMMUNICATIONS	660	225	.....	885	.....	885
Publications (new and reprints)	250	.....	.....	250	.....	250
Publications (new and reprints)—Program Funding	250	.....	.....	250	.....	250
JPO Home Page	180	.....	.....	180	.....	180
ICDN	230	225	.....	455	.....	455
MAINSTREAMING	500	.....	.....	500	8	492
Shipping and Handling Exhibits	120	.....	.....	120	8	112
Exhibits (Creation/Maintenance)	80	.....	.....	80	.....	80
Outreach	300	.....	.....	300	.....	300
National Associations Working Group (NAWG)	100	.....	.....	100	.....	100
NGA Initiative	200	.....	.....	200	.....	200
PROGRAM SUPPORT	8,766	3,971	.....	12,737	4,546	8,192
ITS AMERICA	2,600	2	.....	2,602	600	2,002
MITRETEK	5,500	3,906	.....	9,406	3,906	5,500
JPL SUPPORT	380	.....	.....	380	.....	380
GENERAL PROGRAM SUPPORT	286	63	.....	349	40	309
Smart Technology	110	.....	.....	110	.....	110
Arrowhead Industries	130	.....	.....	130	.....	130
Other Misc. Program Support	46	.....	.....	46	40	6
TASC-Traveler Information Center	.....	35	.....	35	.....	35
Unfunded Interest Payments	.....	28	.....	28	.....	28
ITS DEPLOYMENT INCENTIVES	98,423	26,918	100	125,441	1,430	124,011
FISCAL YEAR 1998 CONGRESSIONAL EARMARKS	.....	2,569	100	2,669	639	2,030
Northeast Corridor (Various Proj)	.....	1,069	.....	1,069	639	430
Commercial Vehicle Operations, I–5 California	.....	1,500	.....	1,500	.....	1,500
National Inst. for Enviornmental Renewal (NIER)	.....	.....	100	100	.....	100
FISCAL YEAR 1999 CONGRESSIONAL EARMARKS	.....	24,349	.....	24,349	791	23,558
Alaska	.....	837	.....	837	.....	837
Amherst, Massachusetts	.....	791	.....	791	.....	791
Centre Valley, Pa	.....	396	.....	396	.....	396
Dade County Florida	.....	791	.....	791	791	.....

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Delaware River, Pa	.....	791	.....	791	.....	791
Hammond, Louisiana	.....	3,166	.....	3,166	.....	3,166
Mission Viejo, California	.....	791	.....	791	.....	791
Nevada—CVO Deployment	.....	350	.....	350	.....	350
New Orleans, Louisiana	.....	1,187	.....	1,187	.....	1,187
New York CVO Deployment	.....	667	.....	667	.....	667
North Dakota State Univ.—ATAC	.....	302	.....	302	.....	302
Northeast ITS Implementation	.....	750	.....	750	.....	750
CVO Northeast Corridor	.....	500	.....	500	.....	500
Tri-State Rural ATIS	.....	250	.....	250	.....	250
Onandaga County, New York	.....	317	.....	317	.....	317
Pennsylvania	.....	11,081	.....	11,081	.....	11,081
CVO Deployment	.....	350	.....	350	.....	350
Commonwealth of Pennsylvania	.....	10,731	.....	10,731	.....	10,731
Scranton, Pa	.....	791	.....	791	.....	791
University of North Dakota—ATWIS	.....	549	.....	549	.....	549
Volusia County, Florida	.....	791	.....	791	.....	791
FISCAL YEAR 2000 CONGRESSIONAL EARMARKS	88,748	.....	.....	88,748	.....	88,748
Albuquerque, New Mexico	1,573	.....	.....	1,573	.....	1,573
Arapahoe County, Colorado	786	.....	.....	786	.....	786
Branson, Missouri	786	.....	.....	786	.....	786
Central Pennsylvania	786	.....	.....	786	.....	786
Charlotte, North Carolina	786	.....	.....	786	.....	786
Chicago, Illinois	786	.....	.....	786	.....	786
City of Superior and Douglas County, Wisconsin	786	.....	.....	786	.....	786
Clay County, Missouri	236	.....	.....	236	.....	236
Clearwater, Florida	2,752	.....	.....	2,752	.....	2,752
College Station, Texas	786	.....	.....	786	.....	786
Central Ohio	786	.....	.....	786	.....	786
Commonwealth of Virginia	3,146	.....	.....	3,146	.....	3,146
Commonwealth of Virginia—CVO	.....	.....	.....	.....	.....	.....
Commonwealth of Virginia—Metro/Rural	3,146	.....	.....	3,146	.....	3,146
Corpus Christi, Texas	1,180	.....	.....	1,180	.....	1,180
Delaware River, Pennsylvania	786	.....	.....	786	.....	786
Fairfield, California	590	.....	.....	590	.....	590
Fargo, North Dakota	786	.....	.....	786	.....	786
Florida Bay County, Florida	786	.....	.....	786	.....	786
Fort Worth, Texas	1,966	.....	.....	1,966	.....	1,966
Grand Forks, North Dakota	393	.....	.....	393	.....	393
Greater Metro. Capital Region, DC	3,932	.....	.....	3,932	.....	3,932
Greater Yellowstone, Montana	786	.....	.....	786	.....	786
Houma, Louisiana	786	.....	.....	786	.....	786
Houston, Texas	1,180	.....	.....	1,180	.....	1,180
Huntsville, Alabama	393	.....	.....	393	.....	393
Inglewood, California	786	.....	.....	786	.....	786
Jefferson County, Colorado	1,180	.....	.....	1,180	.....	1,180
Kansas City, Missouri	786	.....	.....	786	.....	786
Las Vegas, Nevada	2,202	.....	.....	2,202	.....	2,202
Los Angeles, California	786	.....	.....	786	.....	786
Miami, Florida	786	.....	.....	786	.....	786
Mission Viejo, California	786	.....	.....	786	.....	786
Monroe County, New York	786	.....	.....	786	.....	786
Nashville, Tennessee	786	.....	.....	786	.....	786
Northeast Florida	786	.....	.....	786	.....	786
Oakland, California	393	.....	.....	393	.....	393
Oakland County, Michigan	786	.....	.....	786	.....	786
Oxford, Mississippi	1,180	.....	.....	1,180	.....	1,180
Pennsylvania Turnpike, Pennsylvania	1,966	.....	.....	1,966	.....	1,966
Pueblo, Colorado	786	.....	.....	786	.....	786

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Puget Sound, Washington	786			786		786
Reno/Tahoe, California/Nevada	393			393		393
Rensselaer County, New York	786			786		786
Sacramento County, California	786			786		786
Salt Lake City, Utah	2,359			2,359		2,359
San Francisco, California	786			786		786
Santa Clara, California	786			786		786
Santa Teresa, New Mexico	786			786		786
Seattle, Washington	1,651			1,651		1,651
Shenandoah Valley, Virginia	1,966			1,966		1,966
Shreveport, Louisiana	786			786		786
Silicon Valley, California	786			786		786
Southeast Michigan	1,573			1,573		1,573
Spokane, Washington	393			393		393
St. Louis, Missouri	786			786		786
State of Alabama	1,022			1,022		1,022
Alabama—CVO Deployment						
Alabama—Metro/Rural Deployment	1,022			1,022		1,022
State of Alaska	2,359			2,359		2,359
Alaska—CVO Deployment						
Alaska—Metro/Rural Deployment	2,359			2,359		2,359
State of Arizona	786			786		786
Arizona—CVO Deployment						
Arizona—Metro/Rural Deployment	786			786		786
State of Colorado	1,180			1,180		1,180
Colorado—CVO Deployment	1,180			1,180		1,180
Colorado—Metro/Rural Deployment						
State of Delaware	1,573			1,573		1,573
Delaware—CVO Deployment						
Delaware—Metro/Rural Deployment	1,573			1,573		1,573
State of Idaho	1,573			1,573		1,573
Idaho—CVO Deployment						
Idaho—Metro/Rural Deployment	1,573			1,573		1,573
State of Illinois	1,180			1,180		1,180
Illinois—CVO Deployment						
Illinois—Metro/Rural Deployment	1,180			1,180		1,180
State of Maryland	1,573			1,573		1,573
Maryland—CVO Deployment						
Maryland—Metro/Rural Deployment	1,573			1,573		1,573
State of Minnesota	5,505			5,505		5,505
Minnesota—CVO Deployment						
Minnesota—Metro/Rural Deployment	5,505			5,505		5,505
State of Montana	786			786		786
Montana—CVO Deployment	786			786		786
Montana—Metro/Rural Deployment						
State of Nebraska	393			393		393
Nebraska, CVO Deployment						
Nebraska—Metro/Rural Deployment	393			393		393
State of Oregon	786			786		786
Oregon—CVO Deployment						
Oregon—Metro/Rural Deployment	786			786		786
State of Texas	3,146			3,146		3,146
Texas—CVO Deployment						
Texas—Metro/Rural Deployment	3,146			3,146		3,146
State of Vermont Rural Systems	786			786		786
States of New Jersey and New York	1,573			1,573		1,573
Statewide Transcom/Transmit Upgrades, New Jersey	3,146			3,146		3,146
Tacoma Puyallup, Washington	393			393		393
Thurston, Washington	786			786		786
Towamencin, Pennsylvania	472			472		472

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Wausau-Stevens Point-Wisconsin Rapids, Wisconsin	1,180	.....	.....	1,180	.....	1,180
Wayne County, Michigan	786	.....	.....	786	.....	786
FISCAL YEAR 2000 CONGRESSIONAL EARMARKS—TEA–21	7,752	.....	.....	7,752	.....	7,752
Great Lakes ITS Implementation	1,573	.....	.....	1,573	.....	1,573
Northeast ITS Implementation	3,932	.....	.....	3,932	.....	3,932
Hazardous Materials Monitoring Systems	1,204	.....	.....	1,204	.....	1,204
Translink—Texas Transportation Institute	1,043	.....	.....	1,043	.....	1,043
EVALUATIONS OF EARMARKED PROJECTS	1,924	.....	.....	1,924	.....	1,924
GRAND TOTALS	183,955	39,489	331	223,775	18,942	204,833

HIGHWAY/RAIL GRADE CROSSINGS

Question. What is the status of each of the ITS projects intended to advance safety at highway/rail grade crossings? For each project, please list accomplishments to date, purposes and objectives, amount obligated, amount planned to be spent, amount unobligated, scope and nature of the project, status, and expected date of completion.

Answer. There are currently seven projects supported by USDOT that examine how ITS can improve safety and efficiency of travel at rail-highway grade crossings. These seven active projects are in addition to the Vehicle Proximity Alert System (VPAS) field testing that was completed in 1994. The Federal share of funding for these seven projects comes from a wide variety of sources: FHWA, FRA and FTA. Several are grass-roots initiatives that were included as part of corridor or statewide "high-priority" (earmarked) programs that local participants chose to pursue without federal assistance.

Minnesota Guidestar

Purposes and objectives.—The Minnesota Department of Transportation entered into a partnership with 3M Corporation and Dynamic Vehicle Safety Systems (DVSS) to develop an in-vehicle warning system, and test that system in a revenue service operational railroad crossing environment. In addition, the partners tested a passive train detection system developed by DVSS.

Amount obligated/Amount planned to be spent/Amount un-obligated.—This project was funded as part of Minnesota Guidestar—Minnesota's statewide ITS program.

Scope and nature of the project.—The system uses 3M's wireless vehicle and roadside communication antennas that can be built into the crossbuck, "RXR" sign and front vehicle license plate. The track?side unit picks up a signal from the railroad's train detection electronics and transmits that signal to 3M's antenna-signs. The in-vehicle display, provided by DVSS, alerts drivers using both visual and audible signals. The passive system detects an internal radio frequency communication emitted by the Front Rear End Device (FRED), which is used by most freight railroads to coordinate braking between the front and rear of the train. The FRED passive train detectors are installed directly onto the vehicles, so that no special equipment is needed at the crossing infrastructure. SRF Consulting Group, Inc. served as an independent evaluator during the tests.

Status.—Testing took place on 30 school buses at five revenue service crossings, operated by Twin Cities & Western Railroad, in Glencoe, Minnesota—a rural community 30 miles west of the Minneapolis/St. Paul metropolitan area. Testing of the in-vehicle warning system took place from December 1997 to May 1998 and testing of the passive train detection system took place in June 1998.

Expected date of completion.—The project was completed in August 1998 and a final evaluation report is available.

Gary-Chicago-Milwaukee Corridor

Purposes and objectives.—The Illinois Department of Transportation is partnering with a team lead by Raytheon E-Systems to design and install an in-vehicle warning

system, test that system in a revenue service operational railroad crossing environment, and provide on-going maintenance of the system.

Amount obligated/Amount planned to be spent/Amount un-obligated.—This project is being funded as part of the Gary-Chicago-Milwaukee ITS Corridor program.

Scope and nature of the project.—The contract team includes Cobra Electronics, Calspan SRL and the Metro Transportation Group as subcontractors. The advisory in-vehicle warning systems were installed in 300 vehicles, including school buses, emergency service vehicles (police, fire, EMS), and commercial vehicles which regularly traverse the study area. The study area included five railroad grade crossings on the Metra-Milwaukee North Line which is in the northern Chicago suburbs. The in-vehicle receiver is capable of operating in three modes: audible only, visual only and combination audio/visual. The University of Illinois at Urbana-Champaign is serving as an independent evaluator during the test. The University of Illinois evaluation will emphasize the reaction and perception of the drivers to the warning information provided under different modal scenarios.

Status.—The track-side equipment was installed in Spring 1998, but due to technical problems, the in-vehicle equipment had to be replaced. This was completed in the Fall of 1999. Additional system refinement postponed the beginning of the demonstration until early March 2000. The system has begun a one-year testing period.

Expected date of completion.—The one year testing and evaluation period should be completed by April 2001 and an evaluation report will be finished by early Fall 2001.

Long Island Railroad

Purposes and objectives.—The New York State Department of Transportation is partnering with Alstom Signaling (formerly known as General Railway Signal Corp.) to develop an Inter-modal Control System (ICS) that uses ITS technologies to perform a number of functions to improve railroad crossing safety. NYSDOT and Alstom will test the ICS in an operational environment.

Amount obligated/Amount planned to be spent/Amount un-obligated.—Thus far the amount of federal funds that have been spent is $4.8 million. The amount of federal monies remaining is $2.82 million. The matching funds that have been spent are $5 million with $975 thousand remaining. The total cost of the current project is $13.6 million and no other sources of funding have been identified to complete the project.

Scope and nature of the project: Several HRI–ITS technologies will be tested at the New Hyde Park transit station of the Long Island Rail Road:

—*Uniform Time Warning System*.—Sensors that detect the speed as well as the presence of on-coming trains will activate bells, lights and gates, so that the time between activation and the arrival of the train is constant. This innovation is expected to reduce gate down-time by up to 50 percent.

—*Near-Side Station Stop*.—Currently, when the train is stopped at the station, the train activates gates and warning lights at both crossings on both sides of the station platform, which creates a situation where impatient drivers might drive around the lowered gates. The combination automatic/manual override system will improve this situation by activating the gates and warning lights at crossings that are very close to the Hyde Park Station.

—*Variable Message Sign*.—A variable message sign will provide motorists and pedestrians with current information about train operations, such as a second train approaching, etc.

—*Priority Vehicle Preemption System*.—Vehicles that require expedited movement, such a ambulances or fire trucks, will have equipment installed on their vehicles that will allow the driver to request preemption at a desired crossing. An approaching train would be slowed or stopped to allow the priority vehicle to cross. If the train has already passed the safe breaking point, the priority vehicle will be given advance notice that it will need to wait at the crossing or use an alternate route.

—*Stalled Vehicle Detection*.—If a vehicle becomes stopped or stalled on the crossing for any reason, the ICS will detect the situation and signal the train to stop before reaching the crossing.

The Volpe National Transportation Systems Center will serve as an independent evaluator during the test.

Status.—Simulations conducted have shown the reduction in delay to motor vehicles at the crossing. The testing is expected to begin in the summer 2000 and the demonstration of the full system capabilities is expected to begin in the Fall 2000.

Expected date of completion.—The project is expected to be completed and a final evaluation report made available by December 2000.

Baltimore Light Rail Transit "Second Train Coming"

Purposes and objectives.—The Maryland Mass Transit Administration tested a second train warning system, which consists of a variable message sign that warns drivers on crossing multiple tracks that a train is approaching. The system was tested in a revenue service crossing environment.

Amount obligated/Amount planned to be spent/Amount un-obligated.—This project was funded by a grant from the Transit Cooperative Research Project (TCRP) program of the Transportation Research Board. The grant is administered by the FTA's Office of Technology (TRI–20).

Scope and nature of the project.—The system was tested at the Timonium Road crossing in Timonium, MD, on the Maryland Mass Transit Administration's light rail transit line.

Status.—The system became operational in September 1998.

Expected date of completion.—The project was completed as of the Spring of 1999 and a final evaluation report is available.

Los Angeles Light Rail Transit "Second Train Coming"

Purposes and objectives.—The Los Angeles Metropolitan Transportation Authority is testing a second train warning system which consists of a variable message sign that warns drivers on which of multiple tracks a train is approaching. The system will be tested in an operational railroad crossing environment.

Amount obligated/Amount planned to be spent/Amount un-obligated.—This project is being funded by a grant from the Transit Cooperative Research Project (TCRP) program of the Transportation Research Board. The grant is administered by the FTA's Office of Technology (TRI–20).

Scope and nature of the project.—The system is being tested at the Vernon Avenue crossing in Long Beach, CA on the Los Angeles Metropolitan Transportation Authority's light rail transit line.

Status.—Installation of the equipment was completed and testing began in the Fall 1999.

Expected date of completion.—The project is expected to be completed and a final evaluation report is expected to be available by the Spring 2000.

San Antonio AWARD

Purposes and objectives.—The Texas Department of Transportation tested a train detection system for traffic management and traveler information called Advanced Warning for Railroad Delays (AWARD). The system was tested in an operational railroad crossing environment.

Amount obligated/Amount planned to be spent/Amount un-obligated.—The AWARD project was part of the San Antonio Metropolitan Model Deployment Initiative, a Federally-funded ITS program in four metropolitan areas to develop and then showcase integrated ITS systems.

Scope and nature of the project.—Acoustic sensors and radar speed guns were placed upstream of three crossings along the Union Pacific Railroad line parallel to I–410 in San Antonio. These sensors were expected to detect the presence, length and speed of approaching trains. The time and duration of crossing blockage was then calculated. The predicted delay was disseminated in three ways:

—Variable message signs upstream from the crossing to alert drivers to take alternate routes or freeway exits to avoid delay.

—The TransGuide traffic management center includes delay information updated each minute and distributed via the Internet to in-vehicle displays.

—Emergency service vehicles such as ambulances use the delay information to plan their routes in real-time.

MDI evaluation contractors SAIC, Virginia Polytechnic Institute and the Volpe National Transportation Systems Center evaluated the system's costs and its ability to reduce travel time and increase travelers' perceived convenience.

Status.—The system became operational in the Summer of 1998 and continued for one year through the Summer of 1999.

Expected date of completion.—The project has been completed and a final evaluation report is available.

Connecticut Four-Quadrant Gate System

Purposes and objectives.—The Connecticut Department of Transportation tested an in-locomotive warning system that warns the locomotive engineer if an obstacle, such as a stopped vehicle, is blocking the crossing in time to bring the train to a complete stop. The system was tested in a revenue service operational railroad crossing environment.

Amount obligated.—$800,000 has been obligated from Section 1036 of ISTEA (FRA) with $200K matching funds provided by the State.

Amount planned to be spent.—All funds have been spent, which are $800,000.

Amount unobligated.—$0

Scope and nature of the project.—A system of four-quadrant gates is used rather than the usual two in order to totally block the crossing. This four-quadrant gate system allows for the possibility that a vehicle might get stuck between the gates. Sensors detect if a vehicle or other obstacle is blocking the crossing and then signals the locomotive engineer in time to stop the train before the train reaches the crossing. A back-up system can also bring the train to a stop automatically, if necessary.

Status.—The demonstration began in July 1998 and continues in operation today. Furthermore, a second crossing in Stonington, Connecticut, has been equipped and will become operational in 2000. Six more crossings in Connecticut are scheduled to be equipped with this system. An evaluation report will be prepared by the Volpe Center later this year (2000).

Expected date of completion.—The project is complete and a final evaluation report is available.

ITS INVESTMENTS

Question. What has been achieved as a result of past ITS investments in that area? How much is budgeted for standards development and operational testing in that area in fiscal year 2001?

Answer. The investment in the Vehicle Proximity Alert System (VPAS) project, which tested several competing in-vehicle warning technologies, provided the opportunity to refine the passive train detection system developed by Dynamic Vehicle Safety Systems (DVSS). The DVSS system was later tested in an operational environment in the Minnesota Guidestar project.

The ITS Joint Program Office is sponsoring a cross-cutting study that will derive common lessons learned from the activities described above. One of the steps in data collection of the cross-cutting study was the hosting of an HRI Evaluation Workshop, which was held in Boston, Massachusetts May 6–7, 1999. Representatives from each of the seven projects described above presented their project implementation plan and evaluation results. This cross-cutting study will provide a basis for a strategic plan for future Federal HRI–ITS activities. In addition, the lessons learned will help guide communities throughout the nation in the implementation of highway-rail crossing technology.

In addition, the Federal Railroad Administration in partnership with the ITS Joint Program Office conducted an Highway-Rail Intersection Standards Development Workshop in July, 1999. From that workshop came the action to develop a strategic plan for standards development and a plan for deployment guidance in the absence of standards. The strategic planning efforts are planned to begin in the Spring of 2000. They will be led by the Federal Railroad Administration.

The fiscal year 2001 budget includes $200,000 in funding for standards development and another $150,000 for HRI evaluation. The intention in fiscal year 2001 is to finalize the HRI strategic plan and get early adopted standards established. With this initial foundation, guidance can be given to the communities for including the elements of the HRI architecture in the engineering studies that are conducted for determining the types of warning devices to be installed.

Question. For each of the last three years, please compare your actual expenditures with the amounts appropriated for each ITS category of funds specified in the conference report. Please indicate the amount of carryover funds for each year by category and explain any deviations from amounts specified in the various conference reports beyond the 10 percent flexibility that is allowed by the Committee.

Answer. Attached is a table which compares actual amounts allocated to the various ITS fund category (program) to amounts included in the Conference Reports accompanying the DOT Appropriations bills for fiscal years 1998, 1999, and 2000.

Fiscal year 1998 was an extremely unusual year in that the appropriation bill was passed several months prior to Public Law 105–178, TEA–21, an authorization bill which significantly changed funding sources and programs from those envisioned at the time of the passage of the appropriation bill. Therefore, although the table includes a comparison of fiscal year 1998 Conference Report amounts with actual allocations, no legitimate comparison can be made due to these legislative changes.

For fiscal years 1999 and 2000, an adjusted amounts column has been added, the purpose of these columns is to necessarily reduce the Conference Report amounts to comply with reductions in the ITS Research and Development funding as mandated annually by Section 1102(f) of TEA–21. These reductions equated to 11.7 percent in fiscal year 1999 and 12.9 percent in fiscal year 2000.

In fiscal year 1999, after adjusting Conference Report amounts by the Section 1102(f) reductions, all of the actual funding allocations are within the 10 percent flexibility provision allowed by the Committee with the exception of Operational Tests. Fiscal year 1999 ITS Operational Tests were necessarily reduced to provide $6.648 million in funding to the National Advanced Driver Simulator (NADS) project in accordance with guidance included on page 1421 of the Conference Report which read "National advanced driving simulator. Within the funds provided for ITS research and development and other surface transportation research contract authority programs, sufficient funds are included for ongoing activities of the national advanced driving simulator."

In fiscal year 2000, after adjusting Conference Report amounts by the Section 1102(f) reductions, all of the actual funding allocations are within the 10 percent flexibility provision allowed by the Committee with the exception of Program Support. Most of the items included under Program Support are multi-year contracts and cooperative agreements with organizations such as ITS America, Mitretek, and the Jet Propulsion Laboratory which provide technical programmatic and administrative services without which the ITS program could not successfully operate. Very little flexibility in the funding amounts in these contracts is available; therefore, the full 12.9 percent overall funding reduction required by Section 1102(f) could not be fully applied to this activity. However, the current amount allocated for Program Support ($8.765 million) is fully within the 10 percent flexibility provision when compared to the actual amount of $9.0 million included in the Conference Report by the Committee.

ANALYSIS OF R&D FUNDING BY CATEGORY

[Dollars in thousands]

Program category	Fiscal year 1998			Fiscal year 1999				Fiscal year 2000			
	Amount in report	Actual allocated [1]	Unoblig. 9–30–98	Amount in report	Adj. amounts [2]	Actual allocated [1]	Unoblig. 9–30–99	Amount in report	Adj. amounts [2]	Estimated allocated [1]	Est. unoblig. 9–30–00
RESEARCH AND DEVELOPMENT	$31,500	$39,651	$1,347	$38,000	$33,554	$35,976	$1,149	$47,450	$41,329	$40,901	.....
OPERATIONAL TESTS	83,900	8,841	2,089	17,000	15,011	7,080	4,744	6,650	5,792	6,090	.....
EVALUATION/PROG. ASSESSMENT	7,000	6,000	634	6,500	5,740	5,510	.....	7,000	6,097	6,000	.....
ARCHITECTURE/STANDARDS	.....	10,662	23	18,000	15,894	14,429	750	16,400	14,284	14,000	.....
INTEGRATION/MAINSTREAMING	.....	10,837	925	6,000	5,298	5,676	1,957	11,700	10,191	9,776	.....
PROGRAM & SYSTEM SUPPORT	7,760	8,654	674	9,500	8,389	8,566	3,971	9,000	7,839	8,765	.....
NAT'L. ADV. DRIVER SIM. (NADS)	.....	.....	.....	.....	.....	6,648	.....	.....	.....	.....	.....
Total	130,160	84,645	5,692	95,000	83,885	83,885	12,571	98,200	85,532	85,532	.....

[1] Allocated Amounts reflect reductions in TEA–21 amounts authorized for ITS R&D as required by Section 1102(f) of TEA–21; i.e 10.9 percent in fiscal year 1998, 11.7 percent in fiscal year 1999 and 12.9 percent in fiscal year 2000.

[2] Adjusted Amounts reflect proportionate reductions in Conference Report amounts as required by Section 1102(f) of TEA–21; i.e 11.7 percent in fiscal year 1999 and 12.9 percent in fiscal year 2000.

Question. Please prepare a detailed table showing any unobligated funds and funds that are obligated but not yet committed by year for any ITS projects specified in the fiscal year 1996-fiscal year 2000 conference reports. What is the status of each of those projects?

Answer.

CONGRESSIONALLY EARMARKED PROJECTS

[In thousands of dollars]

Project	State	Fiscal year					Total	Obligated	Unblig. Bal.
		1996	1997	1998	1999	2000			
Guidestar	Mn	2,000	3,600	6,000			11,600	11,600	
Northeast Corridor	Various	3,500		1,000			4,500	4,500	
Houston Corridor	Tx	2,200	2,000				4,200	4,200	
Milwaukee Corridor	Wi			5,500			5,500	5,500	
New York State Thruway	NY	1,500	3,000				4,500	4,500	
Johnson City	Tn	1,500					1,500	1,500	
Adv. Transp. Weather Info. Sys.(U of ND)	ND	1,000	1,000	775			2,775	2,775	
Hazardous Materials Transp. Safety (NIER)	Pa?	2,500	2,000	1,000			5,500	5,500	
Santa Teresa Border Crossing	NM	900		1,000			1,900	1,900	
Syracuse Congestion Mgmt	NY	1,500		1,000			2,500	2,500	
Nat'l. Transp. Ctr. (Oakdale) (Dowling Coll.)	NY	2,000	2,500				4,500	4,500	
Adv. Railroad/Hwy. Crossings	NY	1,250	2,000				3,250	3,250	
Green Light CVO Project	Or	7,000	7,000				14,000	14,000	
Paralympiad	Ga	1,000					1,000	1,000	
I–10 (Mobile) (Fog Detection System)	Al	3,000	2,000				5,000	5,000	
Capitol Beltway	Md/Va	4,000					4,000	4,000	
Texas Transp. Inst. (Texas A&M)	Tx	600	600	1,000			2,200	2,200	
Western Transp. Inst. (Montana State Univ.)	Mt	1,000		1,000			2,000	2,000	
I–675/SR844/Col. Glenn (Fairborn)	Oh	1,000					1,000	1,000	
Salt Lake City	Ut	2,000	5,000	3,500			10,500	10,500	
Inglewood	Ca		1,000	500			1,500	1,500	
Mobile Adv. Traf. Mgmt. Sys. (Montgomery)	Al		1,000				1,000	1,000	
Traffic Guidance System (Nashville)	Tn		1,000	750			1,750	1,750	
Operation Respond	Md		1,000				1,000	1,000	
Pennsylvania Turnpike	Pa		3,000	6,000			9,000	9,000	
Nat'l. Capitol Region Congest. Mitigation	Various		3,500	6,000			9,500	9,500	
National Advanced Driver Simulator (NADS)	Ia		14,000				14,000	14,000	
Kansas City Region	Ks/Mo		2,500	1,000			3,500	3,500	
US/Canada CVO	Wa		1,500				1,500	1,500	
Rochester Congestion Management	NY		1,500				1,500	1,500	
Urban Transp. Saf. Sys. Ctr. (Drexel Univ., Phila.)	Pa		500	250			750	750	
Arizona Nat'l. Ctr. for Traffic & Logistics	Az			1,000			1,000	1,000	
CVO, I–5 California	Ca			1,500			1,500		1,500

CONGRESSIONALLY EARMARKED PROJECTS—Continued

[In thousands of dollars]

Project	State	Fiscal year					Total	Obligated	Unblig. Bal.
		1996	1997	1998	1999	2000			
Cumberland Gap Tunnel	Ky			1,550			1,550	1,550	
Dade County Expressway, Fla. Toll Collect. Sys	Fl			1,000			1,000	1,000	
Franklin County Ma. Traveler Info. Sys	Ma			875			875	875	
I–90/I–94 Rural ITS Corridor	Wi			1,700			1,700	1,700	
Louisiana I–55, I–10 & 610 ITS System	La			5,500			5,500	5,500	
Market St. & Pa. Convention Ctr. Info. Ctr	Pa			325			325	325	
I–90 Connector, Rennselaer County, NY	NY			1,250			1,250	1,250	
I–275, St. Petersburg, Fla	Fl			1,000			1,000	1,000	
Rt. 236/I–495, Northern Va. ITS System	Va			500			500	500	
Southeast Michigan Now & Ice Mgmt. (SEMSIS)	Mi			1,150			1,150	1,150	
Reno ITS	Nv			1,875			1,875	1,875	
Barboursville/Ona. Traffic Management	Wv			8,000			8,000	8,000	
North Dakota State Univ. Adv. Traffic	ND			600			600	600	
Sullivan Co., NY Emergency Weather System	NY			1,000			1,000	1,000	
New York City toll plaza scanners	NY			1,100			1,100	1,100	
Cleveland transit maintenance environ. Proj	Oh			1,000			1,000	1,000	
Op. Respond Haz. Mat. Response Software	Tx			1,000			1,000	1,000	
Wash. State Radio Comm. Emergency Call Boxes	Wa			750			750	750	
Wash. State Roadway Weather Info. Sys	Wa			1,250			1,250	1,250	
Colo. I–25 Truck Safety Improvements	Co			9,000			9,000	9,000	
Tuscaloosa Traffic Integration and Flow Control	Al			2,200			2,200	2,200	
Alaska Cold Weather ITS Sensing	Ak			1,000			1,000	1,000	
Amherst, Massachusetts					791		791		791
Arlington County, Virginia					594		594	594	
Atlanta, Georgia					1,583		1,583	1,583	
Brandon, Vermont					297		297	297	
Buffalo, New York					396		396	396	
Centre Valley, Pennsylvania					396		396		396
Cleveland, Ohio					791		791	791	
Columbus, Ohio					791		791	791	
Corpus Christi, Texas					712	1,180	1,892	712	1,180
Dade County, Florida					791		791	791	
Del Rio, Texas					791		791	791	

Delaware River, Pennsylvania					791		791		791
Fairfield, California					791	590	1,381	791	590
Fitchburg, Massachusetts					396		396	396	
Greater Metro. Region—DC					3,957	3,932	7,889	3,957	3,932
Hammond, Louisiana					3,166		3,166		3,166
Houston, Texas					1,583	1,180	2,763	1,583	1,180
Huntington Beach, California					791		791	791	
Huntsville, Alabama					791	393	1,184	791	393
Inglewood, California					1,187	786	1,973	1,187	786
Jackson, Mississippi					791		791	791	
Kansas City, Missouri					396	786	1,182	396	786
Laredo, Texas					791		791	791	
Middlesboro, Kentucky					2,374		2,374	2,374	
Mission Viejo, California					791	786	1,577		1,577
Mobile Alabama					1,979		1,979	1,979	
Monroe County, New York					317	786	1,103	317	786
Montgomery, Alabama					989		989	989	
Nashville, Tennessee					396	786	1,182	396	786
New Orleans, Louisiana					1,187		1,187		1,187
New York City, New York					1,979		1,979	1,979	
New York/Long Island, New York					1,820		1,820	1,820	
Oakland County, Michigan					791	786	1,577	791	786
Onandaga County, New York					317		317		317
Port Angeles, Washington					396		396	396	
Raleigh-Wake County, North Carolina					1,583		1,583	1,583	
Riverside, California					791		791	791	
San Francisco, California					1,187	786	1,973	1,187	786
Scranton, Pennsylvania					791		791		791
Silicon Valley, California					1,187		1,187	1,187	
Spokane, Washington					356	393	749	356	393
Springfield, Virginia					396		396	396	
St. Louis, Missouri					594	786	1,380	594	786
State of Alaska					1,187	2,359	3,546	350	3,196
State of Idaho					791	1,573	2,364	791	1,573
State of Maryland					1,979	1,573	3,552	1,979	1,573
State of Minnesota					5,619	5,505	11,124	5,619	5,505
State of Mississippi					791		791	791	
State of Missouri					396		396	396	
State of Montana					554	786	1,340	554	786
State of Nevada					455		455	105	350

CONGRESSIONALLY EARMARKED PROJECTS—Continued

[In thousands of dollars]

Project	State	Fiscal year					Total	Obligated	Unblig. Bal.
		1996	1997	1998	1999	2000			
State of New Jersey					2,374		2,374	2,374	
State of New Mexico					791		791	791	
State of New York					1,979		1,979	1,979	
State of North Dakota					1,148		1,148	297	851
Commonwealth of Pennsylvania					11,081		11,081		11,081
State of Texas					791	3,146	3,937	791	3,146
State of Utah					2,849		2,849	2,849	
State of Washington					1,583		1,583	1,583	
State of Wisconsin					1,187		1,187	1,187	
Temucula, California					198		198	198	
Tucson, Arizona					791		791	791	
Volusia County, Florida					791		791		791
Warren County, Virginia					198		198	198	
Wausau-Stevens Point, Wisconsin					791	1,180	1,971	791	1,180
Westchester/Putnam County, New York					396		396	396	
White Plains, New York					791		791	791	
Albuquerque, New Mexico						1,573	1,573		1,573
Arapahoe County, Colorado						786	786		786
Branson, Missouri						786	786		786
Central Pennsylvania						786	786		786
Charlotte, North Carolina						786	786		786
Chicago, Illinois						786	786		786
City of Superior & Douglas Co., Wisconsin						786	786		786
Clay County, Missouri						236	236		236
Clearwater, Florida						2,752	2,752		2,752
College Station, Texas						786	786		786
Central Ohio						786	786		786
Commonwealth of Virginia						3,146	3,146		3,146
Delaware River, Pennsylvania						786	786		786
Fargo, North Dakota						786	786		786
Florida Bay County, Florida						786	786		786
Fort Worth, Texas						1,966	1,966		1,966
Grand Forks, North Dakota						393	393		393

Greater Yellowstone, Montana						786	786		786
Houma, Louisiana						786	786		786
Jefferson County, Colorado						1,180	1,180		1,180
Las Vegas, Nevada						2,202	2,202		2,202
Los Angeles, California						786	786		786
Miami, Florida						786	786		786
Northeast Florida						786	786		786
Oakland, California						393	393		393
Oxford, Mississippi						1,180	1,180		1,180
Pennsylvania Turnpike, Pennsylvania						1,966	1,966		1,966
Pueblo, Colorado						786	786		786
Puget Sound, Washington						786	786		786
Reno/Tahoe, California/Nevada						393	393		393
Rensselaer County, New York						786			
Sacramento County, California						786			
Salt Lake City, Utah						2,359			
Santa Clara, California						786			
Santa Teresa, New Mexico						786			
Seatle, Washington						1,651			
Shenandoah Valley, Virginia						1,966			
Shreveport, Louisiana						786			
Silicon Valley, California						786			
Southeast Michigan						1,573			
State of Alabama						1,022			
State of Arizona						786			
State of Colorado						1,180			
State of Delaware						1,573			
State of Illinois						1,180			
State of Nebraska						393			
State of Oregon						786			
State of Vermont, Rural Systems						786			
State of New Jersey and New York						1,573			
Statewide Transcom/ransmit, New Jersey						3,146			
Tacoma Puvallup, Washington						393			
Thurston, Washington						786			
Towamencin, Pennsylvania						472			
Wayne County, Michigan						786			
Totals		39,450	61,200	82,400	83,104	88,748	354,902	242,506	112,396

DEPLOYMENT PROJECTS

Question. Please prepare a list of all of the fiscal year 1996-fiscal year 2000 operational tests or earmarked deployment projects and indicate their starting date, expected date of completion, expected submittal date of final evaluation, remaining unobligated balances, remaining obligated balances, and any anticipated challenges that might interfere with their completion.

Answer. With the exception of the remaining obligated balances, our response is provided in the tables below. In order to provide data regarding unspent balances, we would have to conduct a coordinated effort with our financial administrators both in the Headquarters, Resource Centers and Division Offices to search databases and cross-reference accounting codes.

Please note that the expected date of completion and expected submittal date of final evaluation are the same dates in our definition of project completion. Projects are not considered completed until the final, publicly available evaluation report is approved and submitted. The fiscal year 1999 earmarked deployment/integration projects are listed with estimated completion dates. Accurate identification of evaluation completion dates at this time is problematical since evaluation planning is, in many cases, still in progress. There are currently no unobligated balances of ITS funds associated with these projects except those listed at the end of the response in a separate table. The identification of anticipated challenges is based on project description information only.

Project	Start date	Expected completion/ final report date	Remain. obligated balance
OPERATIONAL TESTS			
METROPOLITAN ITS INFRASTRUCTURE: DIRECT—Phase II	5/1/99	3/1/01	$1,000,000
RURAL ITS INFRASTRUCTURE:			
Acadia National Park	11/1/99	12/30/01	1,000,000
Arizona I–40 Traveler & Tourist Information System	10/1/97	4/30/00	250,000
Branson, MO TRIP	10/1/97	4/30/00	600,000
Cape Cod Rural Advanced Intermodal Transportation System	10/14/97	6/30/01	200,000
FORETELL	10/30/97	3/15/00	1,300,000
Greater Yellowstone Rural ITS	6/30/97	7/30/00	1,500,000
North Florida Rural Transit ITS	9/30/97	5/30/02	200,000
COMMERCIAL VEHICLE INFRASTRUCTURE: Operation Respond	1/6/97	3/30/00	1,540,000
INTERMODAL FREIGHT:			
An Integrated Cargo Info & Security System for Intermodal Distribution	9/29/99	11/30/01	698,805
Deployment of ITS Technology to Facilitate Movements of Intermodal Freight	9/9/99	11/30/01	1,032,500
INTELLIGENT VEHICLE INITIATIVE:			
Generation 0—Freightliner Corp	11/30/99	12/30/02	3,933,000
Generation 0—Mack Trucks	11/30/99	12/30/02	1,380,000
Generation 0—Minnesota DOT	11/30/99	12/30/02	3,886,000
Generation 0—Volvo Trucks	11/30/99	12/30/02	3,490,000
DEPLOYMENT/INTEGRATION PROJECTS—FISCAL YEAR 1997 TO JUNE 1998			
METROPOLITAN ITS INFRASTRUCTURE:			
Advance Corridor Transportation Information Center	97	6/30/01	9,884,839
Inglewood, California ATMS Project	9/20/97	1/30/01	1,187,204
Nashville, Tennessee Traffic and Parking Guidance System	8/21/97	6/30/00	1,750,000
New York-New Jersey-Connecticut (TRANSCOM) ITS Infrastructure Model Deployment	10/1/96	6/30/00	10,610,000
Pennsylvania Turnpike Traveler Information System	9/30/97	7/30/01	9,000,000
Phoenix, Arizona AZTech Model Deployment Initiative	10/31/96	3/30/00	7,520,000
Rochester, New York Congestion Management. Anticipated challenge: Design analysis resulting in delays.	8/6/97	12/31/01	1,500,000
Salt Lake Valley ATMS Systems Integration	9/30/97	12/30/01	8,500,000

Project	Start date	Expected completion/ final report date	Remain. obligated balance
San Antonio, Texas Transguide Metropolitan Model Deployment	10/31/96	3/30/00	7,144,000
Seattle, Washington Smart Trek Model Deployment	10/31/96	3/30/00	13,688,000
RURAL ITS INFRASTRUCTURE: Coutts/Sweet Grass Automated Border Crossing Proposal	5/28/97	6/30/00	500,000
COMMERCIAL VEHICLE INFRASTRUCTURE: CVISN—Model Deployment (Commercial Vehicle Information Systems & Networks)	10/30/96	9/30/03	21,100,000

In the following table, the "State of" earmarks are designated by the titles of ITS Integration Program project (metro/rural) with their associated dates and funding. Additionally, a CVO Deployment amount with no associated project-related data is also listed.

Project	Start date	Expected completion/ final report date	Remain. obligated balance
DEPLOYMENT/INTEGRATION JULY 1998 FORWARD			
METROPOLITAN ITS INFRASTRUCTURE:			
Colorado I–25 Truck Safety Improvements	10/30/98	9/30/01	$9,000,000
Dade County Expressway, Florida Toll Collection System	10/1/98	TBD	1,000,000
I–275 St. Petersburg, Florida	10/1/98	TBD	1,000,000
I–90 Connector, Rensselaer County, New York	10/30/98	2/27/01	1,250,000
Kansas City, Missouri Intermodal Common Communications Technology. Anticipated challenge: Schedule performance	10/30/98	3/30/00	1,000,000
Louisiana Interstate 55, 10 and 610, Intelligent Transportation Systems	10/30/98	6/30/01	5,500,000
Market Street and Pennsylvania Convention Center Passenger Information Center	10/30/98	7/30/00	325,000
MONITOR	10/30/98	10/30/01	6,000,000
National Capital Region Congestion Mitigation	10/1/98	4/30/02	6,000,000
New York City Toll Plaza Scanners	10/30/98	3/30/02	1,100,000
Route 236/I–495 Northern Virginia ITS	10/30/98	10/30/00	500,000
Syracuse, New York Advanced Transportation Management System	10/30/98	1/31/03	1,000,000
Tuscaloosa, AL Traffic Integration and Flow Control	10/1/98	12/30/01	2,200,000
Arlington, Virginia Transit Priority and Emergency Vehicle Preemption. Anticipated challenge: Possible institutional issues across jurisdictions.	9/30/99	8/30/01	593,602
Atlanta, Georgia ITS Component Integration—Phase I	9/30/99	12/30/02	1,582,939
Cleveland, Ohio Transportation Management and Integrated Communications Center. Anticipated challenge: Aggressive schedule	9/30/99	12/31/00	791,470
Columbus, Ohio ITS Integration—Phase I	5/30/99	10/30/01	791,470
Corpus Christi, Texas, Integration of Intelligent Transportation Systems	9/30/99	12/30/01	712,323
Del Rio, Texas Integration of Intelligent Transportation Systems	9/30/99	TBD	791,470
Great Lakes Implementation	9/30/99	3/30/01	1,582,939
Huntington Beach, CA I–405 Multi-Jurisdictional Smart Corridor and Caltrans District 12 Intertie Project. Anticipated challenge: Aggressive schedule. Hardware software integration	9/30/99	12/30/00	791,530
I–880/SR 17 Smart Corridor Improvements-Silicon Valley, California	9/30/99	7/30/01	1,187,204

Project	Start date	Expected completion/ final report date	Remain. obligated balance
Intelligent Transportation Systems Integration Project for Transportation Operators in Solano County. Anticipated challenge: Possible schedule problems	9/30/99	11/30/00	792,470
ITS Improvement Project for Niagara International Transportation Technology Coalition (NITTEC) and Western New York Incident Management	9/30/99	12/31/01	395,734
Jackson, Mississippi Intelligent Transpiration System Implementation	9/30/99	12/31/00	791,470
Kansas City Region Integrated Automation System Devices	9/30/99	12/31/00	395,735
Laredo, Texas Integration of Intelligent Transportation Systems	9/30/99	12/30/02	791,470
Law Enforcement Intelligent Network Systems	9/30/99	5/30/01	791,469
Mobile, Alabama ITS Integration	9/30/99	12/31/02	1,979,000
Montgomery, Alabama Intelligent Transportation System. Anticipated challenge: Possible schedule challenges with installation of communications	9/30/99	11/30/00	989,337
Nashville, Tennessee Area Intelligent Transportation System	9/30/99	12/31/01	396,735
Nevada Archived Data Subsystem Component of Las Vegas Area Freeway and Arterial System of Transportation	9/30/99	12/31/00	105,095
New York City Multi-Operating Agency Integrated Transportation Management System (ITMS)	9/30/99	10/30/01	1,978,674
New York City/Long Island Transportation Management Center (TMC) Integration	9/30/99	10/30/01	1,300,380
Raleigh/Wake Co., North Carolina ITS Integration	9/30/99	12/31/01	1,582,939
Riverside County Transit ITS Demonstration	9/30/99	11/30/02	791,496
San Francisco, California Integrated Transportation Management System Project	9/30/99	9/30/01	1,187,000
Springfield, Missouri Region ITS Planning Document	9/30/99	11/30/00	45,735
Springfield, Virginia Interstate Interchange	9/30/99	11/30/01	395,735
St. Louis Region Smart Integrated Metropolitan Area Map	9/30/99	12/31/00	593,602
State of Minnesota-Metro/Rural			
CVO Deployment	9/30/99	On-going	3,699,000
			1,920,000
State of Mississippi ITS Integration Project-Metro/Rural			
CVO Deployment	9/30/99	12/31/00	441,470
			350,000
State of New Jersey-Metro/Rural			
CVO Deployment	9/30/99	11/30/01	2,024,407
			350,000
State of New Mexico Statewide ITS Architecture-Metro/Rural			
CVO Deployment	9/30/99	11/30/00	50,000
			741,000
State of Texas Statewide Software and Systems Integration Center-to-Center Communications Project-Metro/Rural			
CVO Deployment	9/30/99	11/30/01	791,470
			50,000
Temecula, California I–15 Traffic Surveillance and Signal System Integration Project. Anticipated challenge: Aggressive schedule. Communications interfaces	9/30/99	11/30/00	197,867
Tucson, Arizona Integration of Real-Time Traffic Information for Adaptive Signal Control, Traveler Information and Management of Transit and Emergency Services	9/30/99	6/30/02	791,469
Utah ITS Integration	9/30/99	12/31/02	2,849,290
Washington, DC Metropolitan Region ITS Integration	9/30/99	12/31/00	3,957,348

Project	Start date	Expected completion/ final report date	Remain. obligated balance
Westchester/Putnam Counties, New York Regional Transit Operations Information Integration	9/30/99	10/30/01	915,734
White Plains-Westchester County, New York Interoperable Coordinated Signal System. Anticipated challenge: Aggressive schedule. Communications links	9/30/99	10/30/00	791,470
Dade County, Florida. Anticipated challenge: Ambitious schedule	2/11/00	2/28/01	791,000
RURAL ITS INFRASTRUCTURE:			
Alaska Cold Weather ITS Sensing	10/1/98	9/30/00	1,000,000
Cumberland Gap Tunnel and Regional Deployment (Middlesboro, Kentucky)	9/1/98	6/30/01	3,924,409
Franklin County, Massachusetts Travel Information System	9/30/98	6/30/00	875,000
I–90/I–94 Rural Wisconsin ITS Corridor	10/30/98	10/30/00	2,125,000
Oakland County, Michigan—Southeast Michigan Snow and Ice Management (SEMSIM)	9/30/98	12/31/01	Ph I—1,150,000 Ph II—791,470
Sullivan County, New York Emergency Weather System	10/30/98	10/30/00	1,000,000
Washington State Radio Communication Emergency Call Boxes	10/1/98	10/30/00	750,000
Washington State Roadway Weather Information System	10/1/98	10/30/00	1,250,000
Brandon, Vermont	9/30/99	11/30/00	296,801
Fitchburg, Massachusetts-Montachusett Regional Transit Authority ITS Integration	9/30/99	7/30/01	395,735
Monroe County, New York Integration Project	9/30/99	11/1/01	316,587
Port Angeles, Washington	9/30/99	11/30/01	395,735
Rural ITS Swiss Army Knife Trailer	9/30/99	6/30/01	248,823
Spokane, Washington State Route 395 Traveler Information Project	9/30/99	4/30/01	356,161
State of Idaho ITS Integration-Metro/Rural			
CVO Deployment	9/30/99	12/31/01	441,000
			350,000
State of Washington ITS Deployment and Integration-Metro/Rural			
CVO Deployment. Anticipated challenge: Possible software hardware integration challenges	9/30/99	12/31/01	973,000
			610,000
State of Wisconsin ITS Integration-Metro/Rural			
CVO Deployment	9/30/99	12/31/01	837,204
			350,000
Warren County, Virginia	9/30/99	11/30/01	197,867
Wausau/Stevens Point, Wisconsin	9/30/99	6/30/01	791,470

The following fiscal year 1999 earmarked sites for the ITS Integration Program are in the final stages of preparing final funding agreements, incorporating project details into State Transportation Improvement Programs and other measures. Imminent completion of these measures is anticipated at which time funds will be obligated.

Fiscal Year 1999 Earmarks which will be (but are not yet) obligated in fiscal year 2000

	Unobligated Funds
Alaska	837,000
Amherst, Massachusetts	791,000
Centre Valley, Pennsylvania	396,000
Delaware River, Pennsylvania	791,000
Hammond, Louisiana	3,166,000

Fiscal Year 1999 Earmarks which will be (but are not yet) obligated in fiscal year 2000—Continued

	Unobligated Funds
Mission Viejo, California	791,000
New Orleans, Louisiana	1,187,000
North Dakota State University ATAC	302,000
Tri-State Rural ATIS (Northeast ITS Implementation)	250,000
Onandaga County, New York	317,000
Commonwealth of Pennsylvania	10,731,000
Scranton, Pennsylvania	791,000
University of North Dakota—ATWIS	549,000
Volusia County, Florida	791,000

JPO SUPPORT

Question. Please specify on a contract by contract basis how the fiscal year 1999, fiscal year 2000, and fiscal year 2001 program support monies were used or will be used. Please indicate the scope, nature, and amount of each contract.

Answer. There are two principal contractors that provide program support to the JPO; ITS America, and the Mitretek Corp. ITS America is the official advisory committee to the U.S. DOT on the ITS program, and organizes and staffs the national committees that address each major facet of the program. These committees are one of the formal forums to bring together technical expertise in specific areas to review the program, suggest research issues to be addressed, and provide a venue for policy discussions with the ITS community. In addition, there are specific tasks the U.S.DOT requests ITS America to perform that require access to their membership, or that they are uniquely qualified to provide. The U.S. DOT funding covers only these activities, and represents $2.5 million of the approximately $11 million 2000 annual budget of ITS America.

The Mitretek Corp. provides the principal technical support function for the JPO. Mitretek's support can be categorized into 7 general areas:

—Program planning and assessment
—The rural program
—System architecture and deployment
—Communications and frequency spectrum
—Safety technology research for NHTSA
—IVI program
—Incorporating ITS into the transportation planning process

Mitretek is the technical arm of the JPO. As such, they review and/or generate all of the technical guidance, analyses, and research activities in which the JPO is engaged. Most of the small JPO staff are each managing several areas of the program, and also provide the policy development options and rationale for senior management. The Mitretek staff is the support that allows the existence of a small JPO staff to accomplish these tasks. In 1999, the JPO developed and produced separate technical documents that encompassed technical guidance, results of research and deployment, outreach, and informational documents for use by cities and states across the country. Mitretek drafted many of these documents and is the only entity that maintains in depth technical expertise in all facets of the ITS Program.

There are several small activities that provide support to the JPO in the areas of the computer network, the internet Web page, special support for conferences and workshops, and consultants for special issues that arise during the conduct of the program.

The expenditures for program support fall into three categories; ITS America, Mitretek, and miscellaneous support activities.

[In millions of dollars]

Activity	Fiscal years—		
	1999	2000	2001
ITS America	2.5	2.6	2.6
Mitretek	5.25	5.5	5.5
Misc. Support	1.25	0.66	1.0

[In millions of dollars]

Activity	Fiscal years—		
	1999	2000	2001
Total	9.0	8.766	9.1

NATIONAL SYSTEMS ARCHITECTURE AND STANDARDS

Question. Please specify the amount and purposes of all fiscal year 1998, fiscal year 1999, and fiscal year 2000 contracts relating to the national systems architecture and standards work.

Answer. In fiscal year 1998, fiscal year 1999 and fiscal year 2000, $2.498 million, $4.306 million and $4.830 million, respectively, have been placed on system architecture contracts in support of architecture program activities. This includes $1.250 million in fiscal year 1998, $2.103 million in fiscal year 1999 and $2.355 million in fiscal year 2000 to Lockheed Martin and $1.248 million in fiscal year 1998, $2.203 million in fiscal year 1999 and $2.475 million in fiscal year 2000 to Iteris, Inc. (formally Odetics, ITS). These funds and contracts support:

Architecture Deployment Support.—Deployment technical assistance involves direct interface with state, local, and regional transportation planners and engineers. As the top priority, the Architecture Team is conducting workshops at many sites around the country to help structure their individual site architectures, to facilitate the identification of common interfaces, and to keep them apprized of ITS standards related to their individual projects. As part of this effort to broad groups of state and local transportation planners, the Architecture Team has and is providing technical support, reviewing draft transportation plans and architectures, and giving presentations to stakeholders and ITS deployers at numerous meetings and conferences throughout the country. In addition, development of an interactive software tool, "Turbo Architecture", for ITS planners and designers has been completed and will be available in May 2000. This tool will assist them in using the National ITS Architecture as a reference to develop their unique ITS regional and project architectures.

Architecture Training.—The Architecture Team's previously developed two and three-day architecture training courses have now been given on more than 100 occasions to nearly 2200 persons throughout the country through March 2000. These classes have both public and private sector participation and considerable interaction between the students and members of the architecture team. The courses include use of the CD–ROM version of the architecture as well as practical exercises. A three-day advanced architecture course has been developed as a follow-on and is being given to FHWA and FTA ITS specialists to further enhance their knowledge and understanding.

Architecture New User Service Changes.—The rural user community is in the process of developing a new user service to define ITS needs in the area of rural "operations and maintenance". This is expected to become the thirty-second user service. Work should begin in late CY 2000 to expand the National ITS Architecture by integrating this stakeholder user service as had been previously done with both highway-rail intersection and archived data.

Maintenance of the National ITS Architecture.—The architecture team is maintaining and keeping the National ITS Architecture current based on ITS standards development efforts and deployment experiences. Design documents from ITS deployment efforts and draft standards from the five standards development organizations under DOT contract have and are currently being reviewed for modifications and additions to the architecture, with more than 100 such modifications in the most recent revision. In addition, a new section, market packages, was developed in response to stakeholder user requirements.

Distribution of the National ITS Architecture.—Two major means are being used to put the architecture in the hands of transportation planners and engineers. More than 9000 copies of the third version (3.0) of the National ITS Architecture, which includes the Archived Data User Service (ADUS), are being distributed on CD–ROM. Distribution of this version began in December 1999. In addition, the most current version of the architecture is and has been available on the FHWA ITS web site as well as the ITS America web site.

In fiscal year 1998, fiscal year 1999, and fiscal year 2000, $7.673 million, $9.51 million, and $9 million, respectively, have been placed on contracts to advance standards work. The standards program is categorized into five areas:

1. Research and Development, which includes analyzing and defining standards requirements.
2. Standards Development, which provides funding for standards development organizations to write the standards and for technical support organizations to analyze and report on current standards and standards development efforts.
3. Testing and Interoperability, which involves investigating the performance of the standards, measuring the degree of interoperability in standardized systems, rigorously "proving" the standards in realistic transportation settings under realistic operating conditions, and providing information about their performance to public agencies.
4. Implementation, which provides transportation stakeholders involved in deploying ITS systems with outreach, resource materials and information, such as user guides and other documentation about the standards, and training and technical assistance.
5. Conformity, which includes policy development and rulemaking support. For the standards program, in fiscal years 1998, 1999, and 2000, the following amounts (in thousands) were budgeted to advance ITS standards in the five areas:

[In thousands of dollars]

	Fiscal years—		
	1998	1999	2000
Research and Development	400	600	.....
Standards Development	5,413	4,150	4,400
Testing and Interoperability	1,860	2,300	2,500
Implementation	.....	2,460	1,900
Conformity	.....	.....	200
Totals	7,673	9,510	9,000

During the three-year period, contracts for the standards development effort were primarily to standards development organizations to write standards. Five standards development organizations are supported through cooperative agreements. These are the American Association of State Highway and Transportation Officials (AASHTO), the American Society for Testing and Materials (ASTM), the Institute of Electrical and Electronics Engineers (IEEE), the Institute of Transportation Engineers (ITE), and the Society of Automotive Engineers (SAE). Other contracts for standards development support were awarded to the Volpe Transportation Systems Center, to provide planning and analysis assistance, and The Johns Hopkins University Applied Physics Laboratory, to develop and evaluate dedicated short range communications and electronic data interchange standards. Mitretek Systems and the Jet Propulsion Laboratory (JPL) provided technical and program management support.

In the area of testing and interoperability, Battelle Memorial Laboratory ran the formal standards testing program, Oak Ridge National Laboratory tested location referencing approaches and developed metrics and tests for interoperability, and The Johns Hopkins Applied Physics Laboratory tested commercial vehicle electronic data interchange standards and dedicated short range communications (DSRC) standards.

In the area of implementation, lessons learned reports were provided by Battelle and resource materials and training were provided by JPL, ITE, Volpe, the U.S. DOT Peer-to-Peer Program, the U.S. DOT Professional Capacity Building Program, and Equals3.

ITS SUPPLEMENTAL FUNDING

Question. During fiscal year 1999 or fiscal year 2000, which ITS projects required supplemental federal funding above the amounts specified in their original cooperative agreements? Why were these additional funds added?

Answer. In fiscal year 1999, $250,000 of additional funding was added to the Automated Collision Notification Operational Field Test to allow for additional data collection. While no other projects requested funding increases, several received ad-

ditional earmarked funding in the fiscal year 1999 and fiscal year 2000 appropriations.

INTERMODAL FREIGHT TECHNOLOGY

Question. Please provide a description of the two projects selected for intermodal freight technology operational testing. What do you expect to gain from these tests? How much money will be spent on each project? What amount of cost sharing was received for each project?

Answer. The two tests are with the ATA Foundation in conjunction with Illinois State DOT, and with Washington State DOT.

The ATA Foundation project with Illinois State DOT builds on a phase I activity called the "O'Hare Air Cargo Security Access System" conducted by FAA, O'Hare Airport and the ATA Foundation. The phase I project's objective was to develop a biometric smart card access system that would both expedite the transfer of truck-air cargo and enhance the process' security. The project was developed, installed, and tested in Chicago using 87 trucking companies, 12 airlines and 500 drivers.

The Phase II project is called "An Integrated Cargo Information and Security System for Intermodal Distribution Channels", which the focus of the partnership with USDOT. In Phase II, a secured multimodal electronic cargo manifest will be developed allowing for the automated transfer of comprehensive cargo data across transportation modes and political jurisdictions. The primary objective of Phase II is to enhance operational efficiency for freight shippers and operators, while ensuring cargo safety and security for the public good. Similar to Phase I, Phase II will involve biometric smart card technologies to ensure system integrity and security. The system will also utilize an internet-based electronic manifest. Lastly, the project will be installed and beta-tested in Chicago's O'Hare Airport using approximately 10 manufacturers, 10–15 trucking companies, and 5–10 air cargo carriers and receivers that will be recruited by SecurCom and the ATA Foundation. After the beta-test is successfully completed, a second airport and supply chain will be added at Newark, New Jersey.

The total project budget is $1,098,000 with $468,000 in federal funds, a $630,000 match from ILDOT and ATA Foundation.

The second project is focused on the Pacific Northwest is in partnership with the Washington State DOT. The purpose of the project is to link public highway ITS technology with private port-side Electronic Data Interchange (EDI) systems. This will decrease operating costs and reduce congestion by permitting freight organizations to identify and bypass transportation bottlenecks.

The project will involve the Puget Sound Regional Council, the Ports of Tacoma and Seattle, several maritime shipping lines, U.S. Customs, a private company that manufactures electronic tags and the Washington Trucking Association. Three test systems will be developed and evaluated as part of this project:

—The use of disposable electronic container doors seal (E-Seals) as a tool to track shipping containers both in the port and along roadways.

—Several traveler information systems designed to reduce congestion on roads leading to a port's gate. Systems being examined include Internet cameras showing roads leading to port gates and a trucker-oriented web site for container pickup notification.

—Linking the many ITS in the region to collect freight data to support local and regional freight planning.

—The total project budget is $700,000, with $350,000 in federal funds, a $350,000 match from Washing State DOT.

NATIONAL ITS ARCHITECTURE

Question. How are investments in earmarked ITS deployment projects impacting the National ITS Architecture? What progress has been made toward implementing the TEA–21 provision regarding conformance with the National ITS Architecture and Standards? What issues remain?

Answer. USDOT is using investments in earmarked ITS deployment projects to advance the National ITS Architecture by requiring that these projects use the National ITS Architecture and, in most cases, make provisions for development of a regional architecture.

Requirements for ITS earmarked projects are based on the proposed policy on conformance with the National ITS Architecture and standards as contained in the Notice of Proposed Rulemaking (NPRM). The project proposal for the earmarked ITS project shall explicitly state how the National ITS Architecture will be incorporated into the project. The proposed integration project must be part of an existing regional ITS architecture, or, if a regional ITS architecture does not exist, the develop-

ment of a regional ITS architecture must be either ongoing or proposed to be developed in conjunction with the proposed integration. Further, if the proposed project develops a regional architecture it must use the National ITS Architecture in the development; must make provision to include participation from all agencies with which information-sharing is planned; and the regional architecture must include a concept of operations and conceptual design.

Considerable progress has been made toward implementing the TEA–21 provision regarding conformance with the National ITS Architecture and Standards. Two NPRMs have been developed that when taken together will implement the TEA–21 provision regarding ITS architecture and standards conformance. The NPRMs are currently in the signature process. The proposed policy contained in the NPRMs was developed through significant internal discussions and through extensive feedback from stakeholder groups.

The proposed policy spans the transportation planning process and project development; therefore, part of the proposed policy is contained in the NPRM on metropolitan and statewide transportation planning. The remainder of the policy is contained in an NPRM titled "Intelligent Transportation Systems Architecture and Standards." The NPRMs are expected to be published in May 2000. A 90-day comment period follows publication after which USDOT must assess and respond to each comment. During the 90-day comment period, seven outreach sessions will be held throughout the country. The purpose of the sessions is to clarify the proposed rule and to encourage comment. If the comments are not significant, a final policy can be developed based on the NPRM and responses to the docket. A final policy could be published in late 2000 but, more likely, in early 2001. Extensive comments would require additional time.

The primary issues lie after publication of the final rule. Assuming the final rule is similar to the currently proposed rule, the final rule will have impact on numerous transportation agencies. USDOT is currently developing a strategy to support policy implementation with 1) federal field staff and 2) stakeholders.

For federal field staff, technical expertise must be developed sufficiently to enable clear understanding, and consistent implementation and oversight of the policy. Additionally, we anticipate that federal field staff are key to supporting policy implementation with stakeholders. We find that developing sufficient technical depth requires repeated exposure to and application of the policy's principals. We anticipate training, application workshops and repetitious video and teleconferences for federal field staff.

For stakeholders, technical expertise must be developed sufficiently to implement the policy. Stakeholders include Metropolitan Planning Organizations (MPO), state departments of transportation, city and county transportation departments and others. Some stakeholders, such as state, city and county transportation professionals and, possibly, technical staff within an MPO, require technical expertise at a depth that enables development and maintenance of a regional architecture. Training will be necessary in the principals of the policy, the technical applications of the National ITS Architecture, and the systems engineering process. For non-technical planning staff and decision-makers an understanding of the application of the policy is necessary at a higher level. These stakeholders need to understand the basic principles and benefits of integration and interoperability in order to apply it locally. Different training will likely be required for planning staff along with an outreach effort to increase awareness of the policy requirements.

INTEGRATION GOAL OF TITLE V

Question. How are you using investments in earmarked ITS deployment projects to advance the integration goal of Title V of TEA–21?

Answer. The stated goal of the ITS Integration Program is to accelerate the integration and interoperability of ITS across system, jurisdictional and modal boundaries. To that end, all ITS earmarked projects in metropolitan areas are required to focus on integration.

Each earmarked project is required to submit a project proposal. Included in the project proposal is an explicit identification of the ITS components that are proposed for integration. Additionally, the proposal must describe the systems that will be integrated and the technologies that will be deployed to integrate them. USDOT guidance for these projects states that funding shall be used for activities necessary to integrate ITS infrastructure components that are either deployed (existing systems) or will be deployed with other sources of funds. For projects in rural areas, the funds may be used for integration purposes as well as for limited deployment of ITS. The guidance material goes on to specify eligible activities all of which are focused on integration. Development of a regional ITS architecture is also an eligible ex-

penditure since it provides the "blueprint" for integrated deployment. The project proposal must also discuss how the project addresses the other requirements of TEA21 including match, architecture and standards conformance, and evaluation.

All ITS earmarked projects are subject to a review by FHWA field staff and an independent validation by a mutli-agency team composed of headquarters FHWA and FTA staff and FHWA Resource Center staff. That review makes use of a checklist of key issues that must be satisfactorily addressed to award funding. Two items on the checklist are specific to integration. One item requires validation that the proposed project is consistent with the goals and purposes of the ITS Program as describe in Title V of TEA21. The other item requires validation that the project proposal identifies the ITS infrastructure components that will be integrated.

We have prepared an interim report on the TEA–21 ITS Deployment Program outlining how this program is supporting integration. This report will be submitted to the Committees under separate cover.

EARMARKED ITS DEPLOYMENT PROJECTS

Question. How are you using investments in earmarked ITS deployment projects to advance ITS standards work?

Answer. ITS projects funded through Title V of TEA21 are primary targets for the standards testing program. The guidance materials for these projects requires that the project proposal identify the applicable ITS standards and interoperability tests that are being considered or are expected to be specified in the project. Further, the project proposal shall explicitly state that the proposed integration project will cooperate with the test site analysis and be prepared to serve as an ITS standards testing site if selected. Each project will be analyzed as a potential test site for the US DOT ITS Standards Testing Program. Each project will be evaluated based on a set of established criteria to find ITS field sites that can be used in the ITS testing program.

ITS STANDARDS DEVELOPMENT

Question. With the first wave of ITS standards development nearing completion, what steps are being taken to incorporate these standards into deployment at both the state and local levels?

Answer. Earmarked ITS deployment projects, as well as all other ITS deployment projects, are being treated as opportunities to advance ITS standards deployment, at the state and local levels, through testing, outreach, education, technical support, and conformity support activities.

With the standards development activity now producing a number of approved standards, the emphasis on the standards program is shifting from development towards implementation support. Testing, training, and technical support are being given a greater emphasis and being supported by a greater portion of the standards budget.

Standards testing at actual deployment sites provides information to potential users on the reliability, functionality and performance of systems based upon the standards. Building confidence in the standards through standards testing and the wide distribution of the test results will encourage early voluntary adoption of ITS standards at the state and local levels.

Classroom training on the application of standards will be used to assist users in incorporating the standards into ITS deployments. This training will be developed in a modular fashion to allow easy incorporation into existing traffic management and operations training courses and to allow modules to be combined to meet the needs of a particular jurisdiction.

Technical support will be provided through the development of a wide variety of materials such as fact sheets, user guides, sample procurement specifications, lessons learned and case studies. In addition, as sites are beginning to use standards and run into technical issues, the standards program is prepared to offer technical assistance through the Peer-to-Peer program. Individuals familiar with the standards and their use will be made available to deployers of ITS systems for short-term support and troubleshooting.

Question. When will each of the adopted standards be required to be incorporated into any project receiving federal aid funds?

Answer. Two policy setting processes must be complete for ITS standards to be required in a federal ITS project.

First, the rulemaking must be complete that will require use of ITS standards. A Notice of Proposed Rulemaking (NRPM) has been developed and is currently in the signature process which implements section 5206(e) of TEA21 on conformance with ITS architecture and standards. A section of that NPRM addresses the use of

standards. The proposed policy states that any federally funded ITS project shall use USDOT adopted standards. The NPRM is expected to be issued in May 2000. USDOT must address any comments on the NPRM, and develop and publish a final policy. This process will likely be completed in late 2000 or early 2001. Assuming the final policy is the same as the proposed policy contained in the NPRM, the use of USDOT adopted standards will then be required on all federally funded ITS projects.

Second, specific ITS standards must be officially adopted by the USDOT. Once a standard is developed, tested, and deemed ready to use it must go through its own rulemaking process. Standards are proceeding in this manner today. DSRC for commercial vehicle operations (CVO) credentials and safety reports is the first standard for which rulemaking has been initiated. The DSRC NPRM closed on February 25, 2000. Comments are new under review. Once the rulemaking process is completed, the standard is considered to be a USDOT adopted standard.

Question. When will each of the adopted standards be required to be incorporated into any project receiving Title V TEA–21 funds?

Answer. They will be required as soon as they are adopted. See the answer to the previous question for details on the adoption process.

In the meantime, ITS projects funded through Title V of TEA21 are primary targets for the standards testing program. The guidance materials for these projects requires that the project proposal identify the applicable ITS standards and interoperability tests that are being considered or are expected to be specified in the project. Further, the project proposal shall explicitly state that the proposed integration project will cooperate with the test site analysis and be prepared to serve as an ITS standards testing site if selected. Each project will be analyzed as a potential test site for the USDOT ITS Standards Testing Program. Each project will be evaluated based on a set of established criteria to find ITS field sites that can be used in the ITS testing program.

DEPLOYING ITS INFRASTRUCTURE

Question. In 1996, DOT set a goal of deploying the basic ITS infrastructure in the major metropolitan areas within 10 years. What progress has been made in achieving that goal?

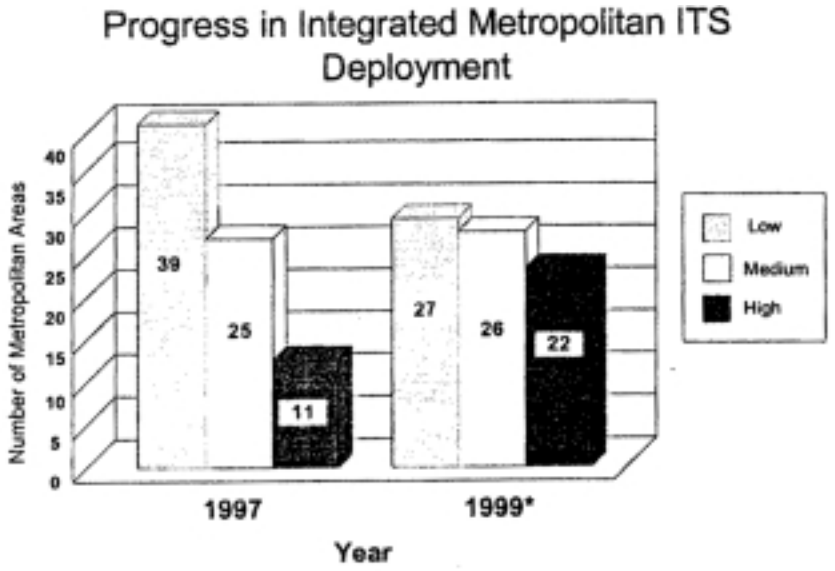
Answer. In January 1996, Secretary Peña set a goal of integrated ITS deployment in 75 of the largest metropolitan areas by 2006. The ITS infrastructure being tracked consists of nine components: Freeway Management; Incident Management; Transit Management; Emergency Management; Transit Management; Electronic Toll Collection; Electronic Fare Payment; Highway Rail Intersections; and, Regional Multimodal Traveler Information. The definition of a complete deployment will vary for each of the 75 metropolitan areas being tracked, in response to variations in local conditions. Factors such as levels of congestion, population growth rates, available budgets, and road and ramp geometry can create quite different sets of requirements for ITS infrastructure in each metropolitan area. Any methodology for measuring progress toward the Secretary's goal must take into account the lack of a single 'one size fits all' solution.

Because of the variation in deployment requirements, it is not currently possible to devise a set of individual deployment goals for each metropolitan area. However, experience in tracking deployment and integration has shown that minimum threshold levels for deployment and integration can be established. These thresholds can provide a common frame of reference for rating deployment and integration progress in the largest metropolitan areas. Using an assessment of the level of metropolitan ITS infrastructure deployment and integration of the individual infrastructure components, metropolitan areas can be assigned ratings of either high, medium, or low for their levels of integrated deployment.

This methodology is based on thresholds that indicate a significant state of deployment—for example, the deployment of surveillance on 20 percent of freeway miles-without necessarily indicating that deployment is complete. Five deployment component areas are used: Freeway Management/Incident Management; Arterial Management; Transit Management; Emergency Management; and, Regional Multimodal Traveler Information. A high rating is achieved when all five thresholds have been attained, low when none are met, and medium where some have been met. Integration is based on the existence of links between Freeway Management, Transit Management, and Arterial Management. When all three have at least some links, the metro area is high for integration. A single rating is assigned that combines the deployment and integration score.

As portrayed in the following figure, 27 regions are characterized low, 26 as medium, and 22 as high in deployment in fiscal year 1999. This can be contrasted with

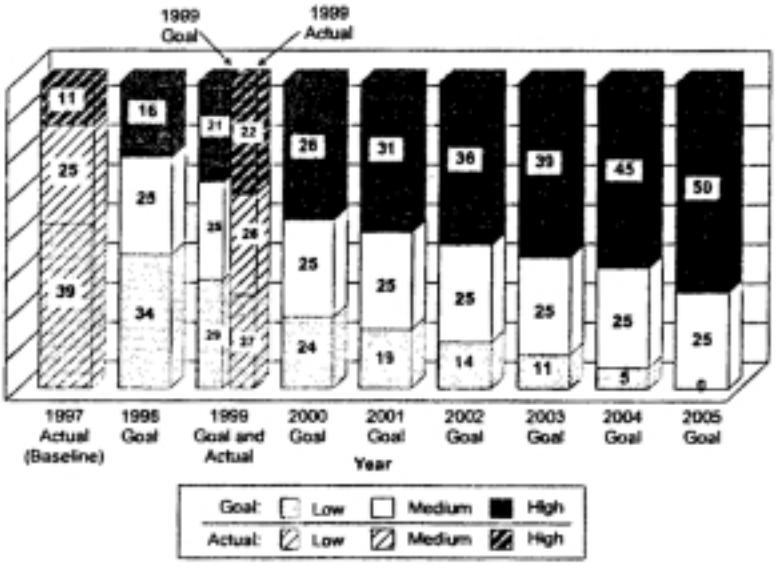
the 1997 deployment baseline in which 39 areas were characterized as low, 25 as medium, and 11 as high. The information suggests that considerable progress has been made in the deployment of integrated ITS over the past two years. A total of 10 areas increased to a high level of deployment and two areas moved from low to medium level of integrated deployment.



* Data as of November 29, 1999 (81% return rate)

The significance of crossing a threshold for either deployment or integration is that a metro area has made a sustained effort to deploy a significant level of at least some of the technology associated with the components or to begin to integrate. It does not mean that deployment or integration are complete. A better way to consider the high, medium, and low ratings is that they are indications of momentum. A high rating indicates broad interest in deploying a regionally integrated ITS infrastructure with at least a significant beginning in deploying and integrating all major components.

The measurement of progress for 1999 can be set in a context of yearly goals leading to successful achievement of the Secretary's 2006 goal. The following figure portrays the level of integrated deployment measured in 1997 and 1999 along with projected levels of deployment for each year through 2005. No data were collected in 1998; therefore, only the projected levels of integrated deployment are shown for 1998. This figure shows that as of 1999, nationwide integrated deployment is advancing at a rate compatible with the achievement of the Secretary's year 2005 goal.



Integrated Deployment Goals and Actual Levels for 75 Metropolitan Areas

FEDERAL AID FUNDS FOR ITS DEPLOYMENT

Question. What evidence exists that the Title V projects are accelerating the use of federal aid funds for ITS deployment?

Answer. Little quantitative data exists to measure how much Title V projects are accelerating the use of federal aid funds for ITS deployment; however, it is clear from review of these projects that federal aid funds are being expended for ITS and that deployment is accelerating.

The Title V ITS project funds require a 50 percent match. Of that 50 percent match, 20 percent must be cash or in-kind contributions wholly related to the project. The other 30 percent match may come from other federal sources. Typically, the 30 percent match is met by other related ITS projects that are funded with federal aid dollars, such as NHS or CMAQ funds. It is common for other federally funded ITS projects to be significantly larger projects than the Title V ITS project.

Additionally, Title V ITS funds are only eligible for projects that directly support integration and interoperability. In order for an integration project to be viable, infrastructure components must be in place. Therefore, in areas that have little existing ITS infrastructure in place, the Title V project provides the impetus for the installation of infrastructure through other funds, typically other federal aid funds. Local governments are anxious to take advantage of the Title V funds and, in many cases, that provides enough incentive for other ITS projects to successfully compete for federal aid funds.

Finally, approximately 50 percent of the fiscal year 1999 and fiscal year 2000 Title V projects are in a top 78 metropolitan area. Data from the deployment tracking surveys for these locations indicates an increase in ITS deployment from 1997 to 1999. Of the top 78 metropolitan areas surveyed in 1997, eleven were classified as "high" deployment areas, 25 were classified as "medium" and 39 were "low". In 1999, the data shows a noticeable change with 22 areas classified as "high", 26 as "medium" and 27 as "low". We believe that the Title V ITS projects with their focus on integration has contributed to this increase in ITS deployment.

STANDARDS PROGRAM

Question. How much of the fiscal year 2000 and fiscal year 2001 funds are likely to be spent on each of the following activities: standards development, standards testing, outreach and education, and standards refinement?

Answer. Under the standards program, in fiscal year 2000 and fiscal year 2001, the following amounts (in thousands) are likely to be spent for the listed activities:

[In thousands of dollars]

	Fiscal years—	
	2000	2001
Standards Development	3,950	3,200
Standards Testing	1,700	1,700
Outreach and Education	1,900	2,300
Standards Refinement	450	350

The standards development activity provides funding for standards development organizations to write the standards and for technical support organizations to analyze and report on standards development, testing and deployment efforts. Standards testing includes formally investigating the correctness, completeness and operation of the standards, measuring the degree of interoperability in standardized systems, rigorously "proving" the standards in actual transportation settings under realistic operating conditions, and providing information about standards performance to stakeholders. While development and testing support has assisted in the technical elements of standardization, an even more significant element of the program relates to actual usage of the formalized standards. Outreach and education are priority activities that provide transportation stakeholders with educational resource materials and technical assistance in support of the deployment of ITS systems. This information combined with an understanding of the application of the standards is essential for successful implementation of ITS Standards. The specific products to be developed and delivered under the outreach and education effort include: user implementation guides, application fact sheets, lessons learned and case studies, sample procurement specifications, application training courses, and technical assistance with implementation. Standards refinement activities address needed modifications and extensions to the standards based upon information obtained from formal standards testing and from the experiences of vendors and users of the standards. Since the formal testing program is in its early stages, the amounts for standards refinement are estimated. These estimates are projected to be approximately 10 percent of the development costs and are currently funded out of the standards development budget.

STRATEGIC VISION FOR ITS RURAL PROGRAM

Question. Please outline the progress that has been made in implementing a strategic vision for the ITS rural program and describe how the fiscal year 2001 request addresses priority challenges.

Answer. We have made significant progress in defining the Rural ITS Program and laying out an aggressive agenda of research, field testing and deployment incentives to develop and deploy ITS systems and services that address the needs of rural travelers and operators. In order to focus the rural ITS research and development program and assure continuity, the program has been organized around a set of development tracks which allows for long-range output-oriented program development. These tracks include Regional Infrastructure, Emergency Services, Rural Transit, Rural Crash Prevention, Rural Traffic Management, Tourism/Traveler Information, and Operations and Maintenance. For each of these development tracks we have developed long-range goals and interim milestones that are being used to direct the program.

Efforts are planned in fiscal year 2001 to further several of the rural development tracks that we consider priority areas. We will be pursuing the deployment of enhanced wireless 911 and automatic collision notification; the development of advanced signal control systems for small communities; the development of practical variable speed limit systems; the deployment of regional/multi-state traveler information; the availability of detailed road specific road surface and weather information for winter maintenance and traveler information; improved rural transportation services (in cooperation with the Departments of Health and Human Services and Labor).

A number of important milestones will be achieved in fiscal year 2001. Under the research program, a weather decision support systems for surface transportation users will be developed; signal control systems and traffic control strategies for small communities will be developed; strategies for the deployment of enhanced wireless 911 and automated collision notification systems will be developed; several examples of integrated subsidized transportation services using ITS technologies will be completed. Under the operational test program, we will initiate a test of a rural variable speed limit system; a field test of one or more rural safety warning systems; a multi-state traveler information service; a test of accurate road surface condition information; an enhanced wireless 911 test and an integrated subsidized transportation service field test.

ITS RURAL PROGRAM

Question. What is the rationale for the requested fiscal year 2001 distribution of funds between research and operational tests in the ITS rural program?

Answer. We have developed a program in rural ITS that we believe is appropriately balanced between research and operational tests. In fiscal year 2001 we have proposed a research budget of $2.75 million to define and develop various rural ITS systems and services as defined in our long range program as well as $7.55 million in operational tests to complement the research program. As we have stated previously, there are a number of reasons why the emphasis has been placed on operational tests in the Rural ITS Program. Field operational tests allow us to engage other stakeholders in the program which is especially important in rural ITS where many of the stakeholders are not currently engaged in ITS nor see how ITS relates to their transportation problems. Field operational tests also ensure that the systems and services developed and tested are practical and deployable. Field operational tests allow us the opportunity to address some of the non-technical challenges associated with the deployment of rural ITS. We are also following advice received from the Appropriations Committee several years ago, when it urged FHWA to spend more on rural ITS operational tests and less on studies related to this program. Having said that there is still a need to carry on a robust program of research and development to address those issues that cannot adequately or efficiently be addressed in a field test. Field tests are not an appropriate tool for such important activities as assessing the extent of a problem, exploring alternate solutions, initial system development or guidance development. We believe this budget reflects that balanced approach.

ITS TRAINING

Question. How much was spent on professional capacity building related to ITS during each of the last three fiscal years and how much is proposed for funding in fiscal year 2001?

Answer. The following amounts were spent on training during the past three fiscal years:

1998—$6.063 M (includes $1.298M for CVO)
1999—$3,529 M (includes $998 for CVO)
2000—$3.350 M (includes $900 for CVO)

ITS HELPING STATES AND LOCAL GOVERNMENT

Question. Please describe how the Department's fiscal year 2001 budget request for ITS research and deployment could help states and local government entities improve their operations and management of the surface transportation system. Please exclude from the discussion the use of the additional contract funds requested beyond the amount now authorized.

Answer. ITS research and deployment funds are being used to produce a wide variety of products designed to help states and local government entities improve their operations and maintenance practices.

Snow, ice, fog, rain and other inclement weather reduce the capacity and safety of road systems. The FHWA will develop and begin testing a winter maintenance weather decision support system for managers and traveler information for travelers. This effort will build upon previous efforts that have focused on roadway winter maintenance, shifting the focus to a variety of road users (e.g., private travelers, commercial vehicle operators, school bus operators, transit operator, and emergency responders). Prototype testing will be conducted to determine optimal information presentation and the filtering and fusing of the various information sources that must take place to achieve this presentation.

In support of releasing the ITS Deployment Analysis System (IDAS), the FHWA will develop case studies on its use in the transportation planning process. IDAS

is as a cost benefit software tool that helps communities determine the costs and benefits of implementing specific ITS improvements. These case studies will supplement the training course on how to use IDAS most effectively. Delivery of the training course will begin in fiscal year 2001, and the Operations CBU will work through our field staff and resource centers to ensure its wide distribution.

Adaptive Signal Control Systems (ACS) allow traffic signal control systems to respond to current traffic conditions in real time. Field tests on three alternative ACS algorithms will be completed in fiscal year 2001. The algorithms that have been developed for various conditions will be commercially available shortly thereafter. The Operations CBU will work through our field staff and resource centers to raise awareness of the application of ACS, what works under what conditions, and provide technical assistance to agencies that wish to implement ACS.

Turbo Architecture is a software tool that was developed in response to our partners' needs in developing regional ITS architectures. It walks the users through the National ITS Architecture through a question and answer process, thereby helping them develop regional and local ITS architectures consistent with the National ITS Architecture. In support of its release at the 2000 ITS America Annual Meeting, training courses will be completed and delivered in fiscal year 2001. Also, the Operations CBU is working with the FHWA field staff and resource centers to ensure that proper technical assistance is available to Turbo Architecture users.

CORSIM (CORridor SIMulation), which is one of the most comprehensive traffic simulation models in the world, allows users to simulate traffic and traffic control conditions on street, corridor, and freeway networks, and measure operational performance. Version 5.0 of CORSIM is integral to a new user friendly version of the traffic simulation suite TSIS, which will provide for an easier method for user to enter data and view the results of the simulation. TSIS 5.0, released late in fiscal year 2000, enables state and local agencies to simulate freeways and large street networks, including ramp metering interactions, for alternatives analyses and planning. In fiscal year 2001, the FHWA will continue to support CORSIM users through the McTrans center, as well as offer training courses on using the simulation.

The ITS Professional Capacity Building (PCB) program has trained almost 9,000 people in various travel management topics geared toward the operation and management of the transportation system. We have also trained over 3,000 people in CVO courses, and over 12,000 people have seen the CVO technology truck. Several states have started to tailor courses to meet their specific needs, including California, Virginia, Florida, and Utah. The focus of the ITS PCB program, especially in fiscal year 2001, is on distance learning, or providing the key technical training courses to the people who need them, when and where they can obtain the training. Working with university partners, three web-based training courses will be delivered in fiscal year 2001, which will reach many additional people to assist them in operating and managing their transportation systems.

In addition to activities solely funded with ITS program funds, we will also pursue other activities with a mix of ITS and Operations program funding. In the area of improved work zone operations, FHWA will be developing decision-making tools which will allow practitioners to evaluate alternate strategies to mitigate the mobility and safety impacts resulting from work zones. We will also continue to develop and deliver technical guidance and training in a number of ITS and operations areas, such as traveler information, traffic management, incident management, arterial management, HOV facilities, and travel demand management.

REALIGNMENT OF JPO

Question. Please discuss how and whether the realignment of the JPO with the operations core business unit in FHWA has delivered more effective guidance and technical assistance regarding ITS to state and local government entities.

Answer. In general, the FHWA realignment has had little impact on the operation of the ITS Joint Program Office (ITS JPO). The ITS JPO continues to provide the planning, strategic direction, coordination and oversight for the ITS program in an independent, multi-modal manner. The Director of the ITS JPO continues to report to both the FHWA Administrator and the Deputy Secretary of DOT. The significant change as a result of realignment has been the ITS JPO Director serving in a dual capacity as the FHWA Operations Core Business Unit, Program Manager. This change has improved FHWA's ability to deliver guidance and technical assistance regarding ITS to state and local governments by:

—Streamlining the decision-making process and bringing about an increased continuity between the ITS JPO and the FHWA units charged with ITS Deployment;

—Integrating ITS into the FHWA leadership through the inclusion of the Operations CBU, Program Manager as part of the FHWA Management Council. In this capacity the Operations, Program Manager works directly with the FHWA Headquarters and Field leadership on the implementation of ITS programs and policies; and

—Facilitating the creation of an ITS Deployment team within the Operations CBU. This team works directly with the ITS staff in the FHWA field offices to support deployment at the State and local level.

REPORTS PERTAINING TO ITS

Question. Please list each of the reports or strategic plans that pertain to ITS as specified in TEA–21 and discuss your progress on each one to date. How much of the fiscal year 2000 budget is allocated to complete those reports or plans and how much is requested in the fiscal year 2001 budget to further these efforts.

Answer. There are two reports or strategic plans that pertain to ITS that are specified in TEA–21. The first is in Section 5206(b), and is the Report on Critical Standards. The TEA–21 required the Department to submit a report to Congress, not later than June 1, 1999, identifying which standards are critical to ensuring national interoperability or critical to the development of other standards and specifying the status of the development of each standard identified. The ITS critical standards report was completed and submitted to Congress in July 1999. The critical standards report is available on the ITS website at www.its.dot.gov. Since the report is complete, no funding will be required in fiscal year 2000 for this activity. The second item is the National ITS Program Plan as required in Section 5205(a)(1) and (a)(2). In order to fulfill this directive in the most timely and useful manner, the DOT has broken down the requirement into three distinct parts: a Five-year Plan; a Ten-year Plan; and a National Deployment Strategy.

The Five-year Plan concentrates on codifying the ITS program's deployment road maps that were developed by DOT in 1998. It addresses how DOT carries out the ITS program under TEA–21 and will broadly guide all program, policy and budget decisions over the next five years. The Draft Five-year Plan has been completed and will be transmitted to Congress after the Office of the Secretary completes its final review. It will be submitted as part of the Surface Transportation Research and Development Strategic Plan.

The Ten-year Plan will focus on identifying a longer-term, next generation ITS research agenda. It will be developed by DOT in partnership with the larger ITS community through ITS America. The Ten-year Plan effort began in February 2000 and will be completed by early 2001.

The National Deployment Strategy is the third part. Unlike the Five- and Ten-year Plans, which focus primarily on DOT activities, the National Deployment Strategy will define the larger array of actions that must be undertaken. ITS America is leading this effort which involves State and local governments, as well as industry, to define the broader strategic actions necessary—beyond DOT spending—to bring about widespread ITS deployment in the United States. The National Deployment Strategy was completed in February 2000 and is being printed. It will be transmitted to the Congress shortly.

It is anticipated that $250,000 will be required in fiscal year 2000 to develop the Ten-Year plan. No fiscal year 2001 funds have been requested for this effort.

ITS INTEGRATION PROGRAMS

Question. As part of the ITS program, FHWA spends millions of dollars on outreach, public information, mainstreaming, and training. Please provide a table indicating the amount of funding spent on each of those activities for each of the last three years and how much is planned for fiscal year 2001.

Answer. The following table depicts what the ITS program actually spent on Integration (Mainstreaming) programs in fiscal years 1998 and 1999 and the amounts anticipated to be spent on this activity in fiscal years 2000 and 2001:

[Dollars in thousands]

	Fiscal years—			
	1998	1999	2000	2001
Technical Assistance	$3,835	$2,950	$4,766	$5,800
Planning/Policy	20	450	500	1,000
Training	6,063	[1] 1,559	3,350	3,700

[Dollars in thousands]

	Fiscal years—			
	1998	1999	2000	2001
Outreach/Comm	919	717	660	580
Mainstreaming	.....	.....	500	.....
Total	10,837	5,676	9,776	11,080

[1] Excludes $1.970M for CVO and Architecture training included under those program categories.

Note: Fiscal year 2000 amount for Mainstreaming (printing and exhibits) shown under Integration whereas in other fiscal years these costs were included in program budgets.

INTERMODAL FREIGHT ACTIVITIES

Question. Please discuss the scope, nature, benefits and costs of the Department's ITS intermodal freight activities. How much was invested in that area during each of the last two fiscal years and how much is requested for fiscal year 2001?

Answer. The ITS intermodal program complements One DOT efforts to coordinate planning and infrastructure development across transport modes. It ensures that technologies applied are interoperable, efficient, and well coordinated. Intermodal is increasingly the means by which trade moves. Trade is also typically multijurisdictional; that is, several States, localities, and other countries may be involved in intermodal freight movement. Given the increasingly reliance on intermodality and the issues of multijurisdictional coordination, a strong Federal presence is required to ensure a strategic and coordinated perspective by all parties. Between 1981 and 1997, the share of U.S. GDP devoted to freight logistics declined from 18.1 percent to 10.4 percent, but has recently increased to 10.8 percent. Developing a strong national ITS intermodal program to improve freight flow efficiency will allow U.S. firms to (1) reduce freight logistics costs; (2) adapt innovative manufacturing/distribution strategies to compete more effectively in a global market; and (3) support advanced corporate basic and applied research programs. The partnership between industry and government will benefit both parties, strengthening the U.S. economic base, protecting U.S. jobs and providing opportunities for advanced technology job creation. This partnership is not possible without strong Federal involvement.

Funding prior to fiscal year 1999 was focused on determining a need for an ITS Freight Architecture, to support an Intermodal Freight Technology Working Group within ITS America, and to develop a research design for an intermodal freight operational test. Funding was also used to help support an intermodal task force within US DOT.

During fiscal year 1999, $500,000 was used to fund ITS intermodal freight pilot projects solicited by a March 1999 Request for Applications (RFA). An additional $100,000 was used to support the ITS America Intermodal Freight Working Group (IFTWG) initiation of the mapping of the intermodal freight process from origin to destination. The IFTWG, a one-of-a-kind public/private initiative, was identified at the first ITS America Intermodal Freight Identification Technology Conference in Reston, Virginia as the means by which a successful intermodal freight program could be developed and implemented. The creation of the IFTWG, and the process mapping project, are key inputs to identifying potential improvements in intermodal freight efficiency including applications of ITS technology.

During fiscal year 2000, $1,000,000 is being used to conduct six major tasks. The first of these is to complete the mapping of the intermodal freight process under the IFTWG. The border operational tests on safety systems, being conducted in conjunction with U.S. Customs, is scheduled for completion. A border crossing modeling tool will be developed to establish a baseline and to measure the benefits of ITS improvements. Oversight and evaluation of the freight operational tests in the Pacific Northwest and in Chicago and Newark will continue. These operational tests include multimodal technology applications to link appropriate information systems that will expedite the movement of trucks through major metropolitan areas as they deliver and pick up containers at port and air freight facilities. A National Freight Technology Conference will be held in Rosslyn to continue the partnership with the Department of Defense and industry on technology harmonization.

In fiscal year 2001, $3 million is requested to build on lessons learned and conduct additional operational tests in major metropolitan areas to enhance the efficiency and safety of commercial vehicle traffic. Additionally the focus of attention will be on the development of a user service to begin the development of a freight architecture as a component of the ITS National Architecture. The freight architec-

ture will support State and MPO responsibilities in facilitating interstate commerce and ensuring public safety.

Included in that activity will be a border architecture to link the activities of transportation, customs and immigration. The two operational tests in the Pacific Northwest and Chicago and Newark are expected to be concluded in fiscal year 2001 and there will be continuing oversight on the commercial vehicle container drayage project.

COMMERCIAL VEHICLE OPERATIONS

Question. What progress have you made in meeting the TEA–21 goal to "deploy CVISN in a majority of states by 2003?" How many and which states will be using a Level 1 CVISN by 2003?

Answer. Forty-two states are in one of the three steps for CVISN Level 1 deployment-planning, design, or deployment. Currently, twelve states are in step 1, planning; twenty states are in step 2, design; and ten states (the original two prototype and eight pilot states) are in step 3, deployment.

Based on a recent survey of all states, eight states have indicated that they expect to complete Level 1 deployment by September 30, 2002. They consist of the two CVISN prototype and six pilot states which have been fully funded to complete Level 1 deployment. We expect Kentucky, Maryland, Washington, and Virginia to be deploying CVISN Level 1 capabilities by the end of fiscal year 2000, and California and Minnesota to be completed by the end of fiscal year 2001. We also expect Colorado and Connecticut to complete Level 1 deployment by the end of fiscal year 2002.

Thirty additional states also responded that they expect to deploy CVISN Level 1 capabilities by September 30, 2003, contingent upon receiving fiscal year 2001 federal ITS deployment funds and/or state resources to support CVISN deployment. The ability to direct federal ITS deployment funds to states which are ready to begin CVISN deployment will help the Department achieve the Congressional goal of completing CVISN deployment in a majority of states by September 30, 2003. The lack of federal ITS deployment funds puts the FMCSA's, the FHWA's and the states' ability to meet this Congressional goal in jeopardy.

Question. Please discuss your plans to specify a DSRC standard for commercial vehicles that would need to be used in projects using federal aid funds. When do you anticipate a final standard? Will your involvement in this standards process provide a neutral basis towards both passive and active approaches?

Answer. Dedicated Short Range Communications (DSRC) is the technology that is used to perform the electronic screening and clearance of commercial vehicles. Electronic screening allows trucks and buses that are equipped with DSRC transponders to bypass weight/inspection stations if they are safe and legal. Electronic clearance is a component of CVISN, which is defined as the collection of information systems and communication networks that support CVO.

The competitive battle over the selection of a technology for use in Dedicated Short Range Communications applications has been going on since the mid-eighties as part of the normal economic and competitive market place. There are two basic transponder technologies employed for DSRC: the "passive" approach provided by two suppliers, and the "active" approach provided by two other suppliers.

In the early nineties, when DSRC technology was applied to the CVO application, two consortiums of states selected the active approach to implement their CVO functions. These consortiums consisted of six states on the west coast, the HELP Crescent project, and the Advantage I–75 project consisting of six midwest states along the I–75 corridor. (These consortia are now known by their commercial names; PREPASS and NORPASS respectively.)

In parallel with these CVO activities, the industry was trying to agree on a common standard through the American Society of Testing and Materials (ASTM) standards setting organization.

The US DOT has been actively involved in this standards process since 1996, and has convened numerous meetings with the various elements of the industry and the users of DSRC technology to encourage the industry to arrive at a consensus. Although the DOT has financially supported ITS standards to accelerate the process, the industry, manufacturers and users are the ones that must agree on a standard. The DOT has not taken sides in the discussion. The DOT's interest is that a standard be adopted.

However, because of their individual commercial interests and their large installed base, principally in electronic toll collection, the industry has been unwilling to agree on a single standard for DSRC. Therefore, at the conclusion of the stand-

ards process, the industry agreed to disagree and adopted a standards that includes both the active and passive technologies.

As a result of the standards stalemate, the DOT entered a regulatory process to require the use of a single technology for CVO applications to ensure national interoperability.

The only option available to the DOT is to choose a technology that was already being used by all the states using DSRC for CVO applications. Thus, the proposed solution is to build upon the equipment already installed, or being installed by 23 states. The proposed rule would require the use of the active technology that is now deployed, with the addition of features from the ASTM standard and the IEEE standard that deals with the application of the devices. This new device would be backward compatible with the existing equipment installed or planned by the states. Therefore, states would not have to modify their existing installations. It is proposed that this provisional standard be employed after January 1, 2001. This provisional standard would not effect electronic toll collection. This proposed regulation was published on December 30, 1999, as FHWA Docket No. 99–5844. The comment period on this proposed regulation closed on February 28, 2000. The US DOT is in the process of evaluating the comments received and expects to publish the final regulation by the middle of 2000.

DSRC PLANS

Question. Which technology will be disadvantaged if the Department proceeds with its current DSRC plans?

Answer. There currently exists a de facto standard for CVO applications. All of the 23 states deploying CVO technology have chosen the active approach. The DOT's proposed regulation would require that all future deployments continue to use the active approach. Thus, the current DSRC plans have the effect of disadvantaging the passive technology.

DSRC STANDARDS

Question. Please discuss why the Department maintains that it must get involved in the DSRC standard, paying particular attention to regional considerations and cross country operations.

Answer. Section 5206(c)(1) of TEA–21 states that:

> If the Secretary finds that the development or balloting of an intelligent transportation system standard jeopardizes the timely achievement of the objectives (interoperability), the Secretary may establish a provisional standard after consultation with affected parties, and using, to the extent practicable, the work product of appropriate standards development organizations.

After several years of trying US DOT has concluded that the industry balloting process cannot nor will not achieve a standard for commercial vehicle operations and that the lack of a DSRC standard will result in non-interoperability among states and regions which are routinely traversed by commercial vehicles in interstate commerce.

Section 5206(c)(2) goes on to state that:

> If a standard identified as critical in the report under subsection (b) is not adopted and published by the appropriate standards development organization by January 1, 2001, the Secretary shall establish a provisional standard after consultation with affected parties, and using, to the extent practicable, the work product of appropriate standards development organizations.

The CVO application of DSRC is the only current use that is considered as necessary for national interoperability, as defined in the "Critical Standards Report" submitted to Congress on April.

The objective of the CVO program is to allow vehicles that have good safety records to travel across the country without stopping for interstate or intrastate inspections. This goal can only be achieved if there is uniformity among the states in how the identification of vehicles is accomplished. Since, the industry has not been able to agree on a single standard for DSRC TEA–21 mandates that the DOT establish a provisional standard. The proposed provisional standard for DSRC would not apply to toll authorities, and thus, would not have any impact on regional toll operations.

TRIPLE LAYER TAG

Question. How likely is it that any manufacturer will manufacture the triple layer tag that is likely to be specified by the Department?

Answer. Both manufacturers of active DSRC devices have verbally indicated that they will manufacture the standard being proposed by the DOT.

NEXT GENERATION TAG

Question. Would it be worth waiting until the next generation tag is developed before imposing a DSRC standard? What are the advantages and disadvantages of waiting?

Answer. No. It is not worth waiting for the next generation DSRC device for three principal reasons.

1. Even though the industry has begun talking about a standards for the next generation DSRC device at the higher frequency of 5.9 Giga Hertz, there is no assurance that we will actually have a single standard. We would likely end up with the same dilemma that exists today; a stalemate between the two technologies.

2. We have no clear indication when the next generation devices will actually be developed, much less available for deployment. Thus, the states that are planning to deploy DSRC for CVO would not know whether to deploy or wait for the elusive next generation. It would substantially delay the deployment of CVISN.

3. Right now, all states use the active transponder and have (or can achieve) technical interoperability. Waiting exposes the interstate commerce world to splitting the market between active and passive mode—with one set or the other being forced to give up their installed technology. By intervening now (as Congress directed in TEA–21) we avoid that problem.

MAILBOX SYSTEM

Question. Previous reports have encouraged the DOT to advance the "mailbox" system to catch drivers who violate out-of-service orders issued by MCSAP inspectors. What is the status of this system and what challenges, costs, and benefits are associated with its deployment? What progress have you made in implementing the directions regarding this technology that were specified in last year's conference report?

Answer. The status is that currently over 3000 locations are receiving the necessary software to connect to the SAFER data mailbox. There are two problems delaying wide-spread implementation and use of the SAFER data mailbox. One is funding for wireless communication from the inspection location to the SAFER data mailbox. States are indicating that the lack of funding for communications is the major obstacle to implementation. Overall cost to get every state connected to the SDM is estimated between $7–8 million. We have developed a strategy to make it more cost-effective for the states to get previous inspection information under the Past Inspection Query (PIQ) routine. The states simply go through the PIQ instead of logging on and off of each system separately. We are in the process of implementing that strategy. The second is for institutional support from many of the states due to concern of data ownership. Some states are concerned about having their field officers upload inspections to the SAFER data mailbox before their supervisors have a chance to check the inspections for quality assurance. Through meetings with the states at a number of national forums, these institutional issues can be overcome. Those meetings are underway.

In terms of benefits, the SDM has been very successful in many states, especially seven Eastern states. The SDM has allowed states to detect uncorrected out-of-service violations, identify falsified log books used to exceed safe hours of operation, and prevent duplicate inspections where there is no evidence of problems. A study published in 1998 showed that safety inspectors removed an additional 4,000 unsafe drivers and vehicles attributable to advanced information systems. Connecticut, especially, has said that the overnight roadside information has proven helpful in focusing their attention on the high risk carriers. The SDM will be even more effective once the Unified Carrier Register (UCR) is operational. The UCR will provide intrastate carrier and commercial vehicle safety and credentials data that roadside inspectors can use to more effectively target high-risk operators.

As a result of directions specified in last years conference report the strategy was developed that will allow states to query multiple data bases through one gateway. Also FMCSA is providing a grant to North Dakota to upgrade, distribute and maintain the PIQ software that will support that multiple query capability, with North Dakota as the lead state along the northern border.

Question. What are your plans, if any, to encourage the development of a truly nationwide mailbox system?

Answer. The SDM technology is fully functional and can be deployed nationwide. Any geographic areas where it is not functioning is due to local State institutional and communication infrastructure issues. Full deployment of a "truly nationwide system" requires considerable State infrastructure and commitment to use state-of-the-art wireless technology and communication protocols. The good news is that wireless technology is rapidly evolving and will become steadily easier to implement and widely available for use in State law enforcement. This will provide State safety and enforcement officials at the roadside access to near real-time inspection information on commercial vehicles and their drivers that have been previously cited for out-of-service violations. Additional funding and State encouragement would accelerate State adoption of the SDM. We plan to meet with the states and encourage their commitment to participate in the SAFER data mailbox (SDM) program. We also plan to encourage states to consider using their 2001 MCSAP funds to cover wireless communication costs. With our development of a system with a multiple query capability, states will be able to access through one gateway previous inspections, make registration decisions based upon safety history, check the overall carrier safety status, get insurance and licensing information, and make driver licensing queries. This will simplify the process and make the inspector more effective in carrying out enforcement responsibilities. This should help the states to justify the investment for remote communication capabilities.

Question. How much is in your fiscal year 2000 spending plan to address this technological option?

Answer. In fiscal year 2000, we are spending $500,000 to enhance and maintain the PIQ software.

Question. How much is in your fiscal year 2001 budget request to address this technological option?

Answer. The Department plans on using $100,000 out of its fiscal year 2001 ITS Budget SAFER request of $2,500,000 to provide enhanced land-line and mobile communications support to new SAFER data mailbox users. The Department's FMCSA fiscal year 2001 Budget request also includes funds to support the Field Systems Group's efforts in enhancing PIQ capabilities for streamlined access to multiple safety systems through the SDM.

Question. What evidence do you have that the mailbox project has been successful?

Answer. Identification of out-of-service violators has increased during the operation of the SAFER Data Mailbox (SDM). However, this increase is influenced by a number of factors and is not necessarily attributable to the SDM. Anecdotal information from individual users indicates that inspection queries to the SDM does help to identify violators, including offenders with out-of-service (OOS) violations and falsified log books that have been inspected earlier on the same trip. In addition, the anecdotal evidence that Connecticut and 6 other Northeastern states have had getting overnight roadside information through the SDM has proven helpful in focusing their attention on the high risk carriers.

INSPECTIONS WITH VIOLATION OF AN OUT OF SERVICE ORDER

	Total inspections	Percent
1997	923	.04
1998	1,105	.05
1999	1,654	.07

Source: Motor Carrier Management Information System (MCMIS).
Note: Data does not include intrastate inspections.

CVISN PROJECTS

Question. How many states have completed their CVISN project plan and "top-level" engineering design? How much of the fiscal year 2000 budget will be used to help the states achieve that technological objective? How many states will be assisted during fiscal year 2001? What are the expected costs of those efforts?

Answer. The two CVISN prototype states and eight pilot states completed their CVISN project plans and top-level designs in June 1997 at a series of three workshops. The workshops are a week in length and spaced over a 9 month period of time. The first deals with scoping, to help the states to define the technical scope

of CVISN and develop a partial CVISN system design. The second deals with planning, to begin the formal planning for the CVISN program. The third deals with design, to complete the detailed design of the system using the first two workshops as key building blocks.

We initiated a second round of technical workshops in July 1999 and expect an additional 20 states to complete their CVISN project plans and top-level designs by the end of fiscal year 2000. The cost for those workshops conducted in fiscal year 2000 is estimated to be $467,000.

We are planning to use $400,000 of fiscal year 2001 funds to sponsor a fourth round of CVISN deployment workshops for up to seven states that will begin during the third quarter of fiscal year 2001. In addition, the I–95 Corridor Coalition has agreed to sponsor a round of deployment workshops during fiscal year 2001 for up to six of its member states. As a result, we expect that up to 13 additional states will complete their CVISN project plans and top-level designs during fiscal year 2001.

CVO BORDER PROJECTS

Question. Please discuss the purpose, status, challenges, and results of the federal investment in each of the CVO border projects. What are the fiscal year 2001 funding needs for each of those projects?

Answer.

Purpose.—The purpose of the CVO border projects was to demonstrate the feasibility of using ITS technology and Dedicated Short-Range Communication (DSRC) technology to facilitate trade and transportation at our international borders. This was demonstrated by installing ITS technology and DSRC at seven border crossing sites, in cooperation with the Treasury Department. Based on the field operational tests (FOTs) conducted at these seven sites, as well as the evaluations conducted of the tests, we believe we have accomplished our intended purpose and believe it is feasible to utilize ITS technology and DSRC at border crossings to facilitate trade and transportation.

Status.—To date, DSRC and ITS technology has been installed at border crossings sites in Otay Mesa, CA., Nogales, AZ., El Paso, TX., Laredo, TX. (two sites), Detroit, MI., and Buffalo, NY. The Department is currently working with the Customs Service to specifically define an architecture and the general design for instrumenting a border crossing. An agreement was signed in September 1999 with US Customs to conduct a test of the International Border Clearance Safety System (IBCSS). The IBCSS communicates between the SAFER system and the National Customs Automation Prototype (NCAP). The tests have been held up due to Customs funding issues. It now appears that the tests will move ahead during fiscal year 2000. There are no funding expectations for fiscal year 2001 to complete the tests.

Program Challenges.—There are numerous program challenges to achieving a seamless border environment that ensures safe and legal commercial motor vehicles. These include:

—institutional challenges and impediments that have occurred with getting cross-cutting, supportive budgets between USDOT and Treasury;
—coordination by Federal agencies for planning, funding and deploying related border crossing initiatives;
—Integration of disparate stakeholder processes (Federal, State, and private);
—Reliability of DSRC during the FOTs; and
—North American Trade Automation Prototype to DSRC interface stability.

Results of Federal Investment & Funding Needs.—All the start-up and installation costs for existing FOTs were funded in previous years. The current focus of the IBCSS is on finalizing the testing safety screening capabilities at two border sites of Laredo, Texas and the Detroit Ambassador Bridge.

Funds obligated in fiscal year 1998 were $1.125 million, and in fiscal year 1999 were $1.1 million to complete the safety system tests. No ITS funds were required in fiscal year 2000 or will be required in fiscal year 2001 for operational tests but emphasis will be placed on the TEA–21 Section 1118/1119 grant funds to the states for international border crossings and trade corridors, and completion of the IBCSS–SAFER tests at the border with Customs. This will feed into completion of a border architecture for future technology application. There will also be emphasis on the development of a simulation tool, in cooperation with other agencies, to measure the effects of proposed improvements. This will start in fiscal year 2000 and continue to the extent necessary in fiscal year 2001.

The results of the federal investment can be summarized in an evaluation of the IBEX project at Otay Mesa, California by Booz-Allen and Hamilton. This evaluation focused on four major areas of interest: documentation of the level of system and

component technical performance; assessment of the user acceptance of the technologies and services provided; estimation of the potential impacts to the trade community; and documentation of the institutional and technical lessons learned.

System Technical Performance

While accurate statistical data regarding the technical performance of the IBEX system are not available, a number of conclusions regarding functionality can be made. As anticipated, the layout of an international border compound, and the operations within it, present a challenge in implementing current DSRC systems in a border environment. The large number of trucks operating in close proximity, often looping the inside of the compound going to and from secondary inspection facilities, place a premium on appropriate reader and antennae placement and tuning. In the import compound, the placement of the advance reader, and the tuning of one of the exit readers, resulted in both missed and extraneous transponder reads. The link between the DSRC system and the NATAP system, referred to as the TRAFIC hub, demonstrated that it was capable of providing communications between transponder-equipped vehicles and the Treasury prototype. However, review of system logs from both systems indicated a success rate of around 60 percent. Thus, while the technical feasibility of the concept was validated, success rates in excess of 90 percent would likely be required for the system to be of value to users.

User Acceptance

Overall, carrier participants indicated that they liked the simplicity of the transponders. They also indicated that they saw a great deal of potential for enhancement of their operations using the technologies provided at the border and on their trucks. A common interviewee comment was that the provided technologies were capable and adequate to perform the intended purpose, but the processes surrounding the technology required further refinement. Participants generally agreed that the cost of technology is continually declining, and they do not believe that transponders and data entry devices will constitute a significant investment. Considering the perceived potential return in time savings and enhanced productivity, some initial investment was considered acceptable provided the process was not required to be duplicated on paper. The perception that the reengineering of the existing paper-based processing is of primary importance was echoed in the responses from participating customs brokers. The primary shipper concern was the degree to which the NATAP program and other automated data exchange programs could be integrated with their existing processes and systems. It should be noted that the commercial participants in this test take part in the maquiladora business model, and as such, represent highly integrated, cross-functional organizations consisting of companies operating under long-term relationships. Therefore, the feelings expressed by these respondents may not necessarily reflect those of other operating models.

Potential Impacts

Test participants were asked to indicate what reduction in border crossing times that they perceived was achieved in using the services and technologies provided by the IBEX program in conjunction with NATAP. All respondents indicated that currently any time savings that may have occurred is tempered by the pre-processing time investment, and the preparation of all of the normal paper documentation that is still required in this phase of the NATAP test. Only when the NATAP test is moved to the next phase where paper documentation is not required do the respondents believe that they will be able to quantify any reduction in time required to move goods across the border. In general, participants interviewed believe that as congestion at the border increases that participation in automated pre-clearance programs will make the difference in the efficiency and competitiveness of their operations. One participant stated that benefits from the current process indicated that participation in the automated border crossing programs early will allow him to make business decisions based on the future character of the border rather than the current situation, once again, maintaining competitiveness in the market.

Lessons Learned

The institutional environment within which international goods movement must take place is highly complex. This complexity has had two major impacts. The first is the travel delay stemming from the difficulty associated with processing goods, vehicles and drivers through the port in a timely manner. The second is the genesis of thriving commercial enterprises that prosper by capitalizing on the secondary effects of inefficient processing and increasing demand. As such, the implementation of systems such as IBEX and NATAP represent positive change from a border operations perspective, and potentially negative change from the perspective of the aforementioned commercial interests. Understandably, there is considerable skep-

ticism regarding the near term success of such systems, especially as long as participation remains voluntary. This skepticism is, however, tempered by those companies who see themselves as forward-thinking, and are confident they can offer participation as a competitive advantage for clients.

CVO FUNDS

Question. How were CVO funds used at the border during fiscal year 2000?

Answer. ITS funds from fiscal year 1999 are being used to complete the border operational tests on safety systems, being conducted in conjunction with U.S. Customs. No additional funds are anticipated in fiscal year 2000. The two tests are scheduled for completion in fiscal year 2000 but are dependent upon US Customs for information systems support. The support is contingent upon US Customs getting funding from Congress to conduct a prototype test of their new import system. Also in fiscal year 2000, a border crossing modeling tool will be developed to establish a baseline and to measure the benefits of ITS improvements. The tool is expected to be used to predict benefits and to assess the benefits once improvements have been made. The model tool will be built to use actual data from each border crossing being evaluated.

ITS DEPLOYMENT FUNDS

Question. Please prepare a table showing the allocation of ITS deployment funds to the fiscal year 1999 and fiscal year 2000 recipients of Title V funds, being certain to show the amount used for integration activities and the amount used for CVISN projects.

Answer. Attached are tables which list recipients of Title V ITS Deployment funds in fiscal year 1999 and projected recipients in fiscal year 2000. The tables also show, as requested, amounts allocated for CVISN and Integration activities.

ANALYSIS OF FISCAL YEAR 1999 ITS DEPLOYMENT INCENTIVE FUNDING

	Congressionally designated amounts	Designations exceed authorizations	Total authorized	Section 1102(f) [1]	Subtotal	Project evaluation [2]	Adjusted total available	Available for CVISN	Available for integration activities
TEA–21 Earmarks	$9,800,000.00	$836,585.37	$8,963,414.63	$1,048,719.51	$7,914,695.12	$113,067.07	$7,801,628.05		$7,801,628.05
Great Lakes ITS Implementation	2,000,000.00	−170,731.71	1,829,268.29	−214,024.39	1,615,243.90	−32,304.88	1,582,939.02		1,582,939.02
Northeast ITS Implementation	5,000,000.00	−426,829.27	4,573,170.73	−535,060.98	4,038,109.76	−80,762.20	3,957,347.56		3,957,347.56
Haz. Mat. Monitoring Systems	1,500,000.00	−128,048.78	1,371,951.22	−160,518.29	1,211,432.93		1,211,432.93		1,211,432.93
Translink—Texas Transp. Inst	1,300,000.00	−110,975.61	1,189,024.39	−139,115.85	1,049,908.54		1,049,908.54		1,049,908.54
Fiscal Year 1999 Appropriation Act	105,000,000.00	−8,963,414.63	96,036,585.37	−11,236,280.49	84,800,304.88	−1,696,006.10	83,104,298.78	$10,634,022.25	72,470,276.53
Amherst, Massachusetts	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Arlington County, Virginia	750,000.00	−64,024.39	685,975.61	−80,259.15	605,716.46	−12,114.33	593,602.13		593,602.13
Atlanta, Georgia	2,000,000.00	−170,731.71	1,829,268.29	−214,024.39	1,615,243.90	−32,304.88	1,582,939.02		1,582,939.02
Brandon, Vermont	375,000.00	−32,012.20	342,987.80	−40,129.57	302,858.23	−6,057.16	296,801.07		296,801.07
Buffalo, New York	500,000.00	−42,682.93	457,317.07	−53,506.10	403,810.98	−8,076.22	395,734.76		395,734.76
Centre Valley, Pennsylvania	500,000.00	−42,682.93	457,317.07	−53,506.10	403,810.98	−8,076.22	395,734.76		395,734.76
Cleveland, Ohio	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Columbus, Ohio	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Corpus Christi, Texas	900,000.00	−76,829.27	823,170.73	−96,310.98	726,859.76	−14,537.20	712,322.56		712,322.56
Dade County, Florida	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Del Rio, Texas	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Delaware River, Pennsylvania	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Fairfield, California	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Fitchburg, Massachusetts	500,000.00	−42,682.93	457,317.07	−53,506.10	403,810.98	−8,076.22	395,734.76		395,734.76
Greater Metro. Region—DC	5,000,000.00	−426,829.27	4,573,170.73	−535,060.98	4,038,109.76	−80,762.20	3,957,347.56		3,957,347.56
Hammond, Louisiana	4,000,000.00	−341,463.41	3,658,536.59	−428,048.78	3,230,487.80	−64,609.76	3,165,878.05		3,165,878.05
Houston, Texas	2,000,000.00	−170,731.71	1,829,268.29	−214,024.39	1,615,243.90	−32,304.88	1,582,939.02		1,582,939.02
Huntington Beach, California	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Huntsville, Alabama	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Inglewood, California	1,500,000.00	−128,048.78	1,371,951.22	−160,518.29	1,211,432.93	−24,228.66	1,187,204.27		1,187,204.27
Jackson, Mississippi	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Kansas City, Missouri	500,000.00	−42,682.93	457,317.07	−53,506.10	403,810.98	−8,076.22	395,734.76		395,734.76
Laredo, Texas	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Middlesboro, Kentucky	3,000,000.00	−256,097.56	2,743,902.44	−321,036.59	2,422,865.85	−48,457.32	2,374,408.54		2,374,408.54
Mission Viejo, California	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Mobile, Alabama	2,500,000.00	−213,414.63	2,286,585.37	−267,530.49	2,019,054.88	−40,381.10	1,978,673.78		1,978,673.78
Monroe County, New York	400,000.00	−34,146.34	365,853.66	−42,804.88	323,048.78	−6,460.98	316,587.80		316,587.80
Montgomery, Alabama	1,250,000.00	−106,707.32	1,143,292.68	−133,765.24	1,009,527.44	−20,190.55	989,336.89		989,336.89
Nashville, Tennessee	500,000.00	−42,682.93	457,317.07	−53,506.10	403,810.98	−8,076.22	395,734.76		395,734.76
New Orleans, Louisiana	1,500,000.00	−128,048.78	1,371,951.22	−160,518.29	1,211,432.93	−24,228.66	1,187,204.27		1,187,204.27

ANALYSIS OF FISCAL YEAR 1999 ITS DEPLOYMENT INCENTIVE FUNDING—Continued

	Congressionally designated amounts	Designations exceed authorizations	Total authorized	Section 1102(f) [1]	Subtotal	Project evaluation [2]	Adjusted total available	Available for CVISN	Available for integration activities
New York City, New York	2,500,000.00	−213,414.63	2,286,585.37	−267,530.49	2,019,054.88	−40,381.10	1,978,673.78		1,978,673.78
New York/Long Island, New York	2,300,000.00	−196,341.46	2,103,658.54	−246,128.05	1,857,530.49	−37,150.61	1,820,379.88		1,820,379.88
Oakland County, Michigan	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Onandaga County, New York	400,000.00	−34,146.34	365,853.66	−42,804.88	323,048.78	−6,460.98	316,587.80		316,587.80
Port Angeles, Washington	500,000.00	−42,682.93	457,317.07	−53,506.10	403,810.98	−8,076.22	395,734.76		395,734.76
Raleigh-Wake County, NC	2,000,000.00	−170,731.71	1,829,268.29	−214,024.39	1,615,243.90	−32,304.88	1,582,939.02		1,582,939.02
Riverside, California	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
San Francisco, California	1,500,000.00	−128,048.78	1,371,951.22	−160,518.29	1,211,432.93	−24,228.66	1,187,204.27		1,187,204.27
Scranton, Pennsylvania	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Silicon Valley, California	1,500,000.00	−128,048.78	1,371,951.22	−160,518.29	1,211,432.93	−24,228.66	1,187,204.27		1,187,204.27
Spokane, Washington	450,000.00	−38,414.63	411,585.37	−48,155.49	363,429.88	−7,268.60	356,161.28		356,161.28
Springfield, Virginia	500,000.00	−42,682.93	457,317.07	−53,506.10	403,810.98	−8,076.22	395,734.76		395,734.76
St. Louis, Missouri	750,000.00	−64,024.39	685,975.61	−80,259.15	605,716.46	−12,114.33	593,602.13		593,602.13
State of Alaska	1,500,000.00	−128,048.78	1,371,951.22	−160,518.29	1,211,432.93	−24,228.66	1,187,204.27	350,000.00	837,204.27
State of Idaho	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51	350,000.00	441,469.51
State of Maryland	2,500,000.00	−213,414.63	2,286,585.37	−267,530.49	2,019,054.88	−40,381.10	1,978,673.78	1,978,673.78	
State of Minnesota	7,100,000.00	−606,097.56	6,493,902.44	−759,786.59	5,734,115.85	−114,682.32	5,619,433.54	1,920,000.00	3,699,433.54
State of Mississippi	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51	350,000.00	441,469.51
State of Missouri	500,000.00	−42,682.93	457,317.07	−53,506.10	403,810.98	−8,076.22	395,734.76	350,000.00	45,734.76
State of Montana	700,000.00	−59,756.10	640,243.90	−74,908.54	565,335.37	−11,306.71	554,028.66	554,028.66	
State of Nevada	575,000.00	−49,085.37	525,914.63	−61,532.01	464,382.62	−9,287.65	455,094.97	350,000.00	105,094.97
State of New Jersey	3,000,000.00	−256,097.56	2,743,902.44	−321,036.59	2,422,865.85	−48,457.32	2,374,408.54	350,000.00	2,024,408.54
State of New Mexico	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51	741,469.51	50,000.00
State of New York	2,500,000.00	−213,414.63	2,286,585.37	−267,530.49	2,019,054.88	−40,381.10	1,978,673.78	1,729,850.30	248,823.48
State of North Dakota	1,450,000.00	−123,780.49	1,326,219.51	−155,167.68	1,171,051.83	−23,421.04	1,147,630.79	50,000.00	1,097,630.79
Commonwealth of Pennsylvania	14,000,000.00	−1,195,121.95	12,804,878.05	−1,498,170.73	11,306,707.32	−226,134.15	11,080,573.17	350,000.00	10,730,573.17
State of Texas	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51	50,000.00	741,469.51
State of Utah	3,600,000.00	−307,317.07	3,292,682.93	−385,243.90	2,907,439.02	−58,148.78	2,849,290.24	200,000.00	2,649,290.24
State of Washington	2,000,000.00	−170,731.71	1,829,268.29	−214,024.39	1,615,243.90	−32,304.88	1,582,939.02	610,000.00	972,939.02
State of Wisconsin	1,500,000.00	−128,048.78	1,371,951.22	−160,518.29	1,211,432.93	−24,228.66	1,187,204.27	350,000.00	837,204.27
Temucula, California	250,000.00	−21,341.46	228,658.54	−26,753.05	201,905.49	−4,038.11	197,867.38		197,867.38
Tucson, Arizona	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Volusia County, Florida	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Warren County, Virginia	250,000.00	−21,341.46	228,658.54	−26,753.05	201,905.49	−4,038.11	197,867.38		197,867.38
Wausau-Stevens Point, Wisconsin	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51

Westchester/Putnam Co., New York	500,000.00	−42,682.93	457,317.07	−53,506.10	403,810.98	−8,076.22	395,734.76		395,734.76
White Plains, New York	1,000,000.00	−85,365.85	914,634.15	−107,012.20	807,621.95	−16,152.44	791,469.51		791,469.51
Project Evaluations						1,809,073.17	1,809,073.17		1,809,073.17
GRAND TOTAL	114,800,000.00	−9,800,000.00	106,000,000.00	−12,285,000.00	92,715,000.00		92,715,000.00	10,634,022.25	82,080,977.75

[1] Reduction (11.7 percent).
[2] Reduction (2 percent).

ANALYSIS OF FISCAL YEAR 2000 ITS DEPLOYMENT INCENTIVE FUNDING

	Congressionally designated amounts	Designations exceed authorizations	Total authorized	Section 1102(f) [1]	Subtotal	Project evaluation [2]	Adjusted total available	Available for CVISN	Available for integration activities
TEA–21 Earmarks	9,800,000	−771,056	9,028,944	−1,164,734	7,864,210	−112,346	7,751,864		7,751,864
Great Lakes ITS Implementation	2,000,000	−157,358	1,842,642	−237,701	1,604,941	−32,099	1,572,842		1,572,842
Northeast ITS Implementation	5,000,000	−393,396	4,606,604	−594,252	4,012,352	−80,247	3,932,105		3,932,105
Haz. Mat. Monitoring Systems	1,500,000	−118,019	1,381,981	−178,276	1,203,706		1,203,706		1,203,706
Translink—Texas Transp. Inst	1,300,000	−102,283	1,197,717	−154,506	1,043,212		1,043,212		1,043,212
Fiscal Year 2000 Appropriation Act	112,850,000	−8,878,944	103,971,056	−13,412,266	90,558,790	−1,811,176	88,747,614	7,297,106	81,450,508
Albuquerque, New Mexico	2,000,000	−157,358	1,842,642	−237,701	1,604,941	−32,099	1,572,842		1,572,842
Arapahoe County, Colorado	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Branson, Missouri	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Central Pennsylvania	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Charlotte, North Carolina	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Chicago, Illinois	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
City of Superior & Douglas Co., Wisc	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Clay County, Missouri	300,000	−23,604	276,396	−35,655	240,741	−4,815	235,926		235,926
Clearwater, Florida	3,500,000	−275,377	3,224,623	−415,976	2,808,647	−56,173	2,752,474		2,752,474
College Station, Texas	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Central Ohio	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Commonwealth of Virginia	4,000,000	−314,717	3,685,283	−475,402	3,209,882	−64,198	3,145,684	2,425,000	720,684
Corpus Christi, Texas	1,500,000	−118,019	1,381,981	−178,276	1,203,706	−24,074	1,179,632		1,179,632
Delaware River, Pennsylvania	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Fairfield, California	750,000	−59,009	690,991	−89,138	601,853	−12,037	589,816		589,816
Fargo, North Dakota	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Florida Bay County, Florida	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Fort Worth, Texas	2,500,000	−196,698	2,303,302	−297,126	2,006,176	−40,124	1,966,053		1,966,053

ANALYSIS OF FISCAL YEAR 2000 ITS DEPLOYMENT INCENTIVE FUNDING—Continued

	Congressionally designated amounts	Designations exceed authorizations	Total authorized	Section 1102(f) [1]	Subtotal	Project evaluation [2]	Adjusted total available	Available for CVISN	Available for integration activities
Grand Forks, North Dakota	500,000	−39,340	460,660	−59,425	401,235	−8,025	393,211		393,211
Greater Metro. Capital Region, DC	5,000,000	−393,396	4,606,604	−594,252	4,012,352	−80,247	3,932,105		3,932,105
Greater Yellowstone, Montana	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Houma, Louisiana	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Houston, Texas	1,500,000	−118,019	1,381,981	−178,276	1,203,706	−24,074	1,179,632		1,179,632
Huntsville, Alabama	500,000	−39,340	460,660	−59,425	401,235	−8,025	393,211		393,211
Inglewood, California	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Jefferson County, Colorado	1,500,000	−118,019	1,381,981	−178,276	1,203,706	−24,074	1,179,632		1,179,632
Kansas City, Missouri	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Las Vegas, Nevada	2,800,000	−220,302	2,579,698	−332,781	2,246,917	−44,938	2,201,979		2,201,979
Los Angeles, California	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Miami, Florida	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Mission Viejo, California	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Monroe County, New York	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Nashville, Tennessee	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Northeast Florida	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Oakland, California	500,000	−39,340	460,660	−59,425	401,235	−8,025	393,211		393,211
Oakland County, Michigan	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Oxford, Mississippi	1,500,000	−118,019	1,381,981	−178,276	1,203,706	−24,074	1,179,632		1,179,632
Pennsylvania Turnpike, Pa	2,500,000	−196,698	2,303,302	−297,126	2,006,176	−40,124	1,966,053		1,966,053
Pueblo, Colorado	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Puget Sound, Washington	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Reno/Tahoe, California/Nevada	500,000	−39,340	460,660	−59,425	401,235	−8,025	393,211		393,211
Rensselaer County, New York	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Sacramento County, California	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Salt Lake City, Utah	3,000,000	−236,038	2,763,962	−356,551	2,407,411	−48,148	2,359,263		2,359,263
San Francisco, California	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Santa Clara, California	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Santa Teresa, New Mexico	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421	786,421	
Seattle, Washington	2,100,000	−165,226	1,934,774	−249,586	1,685,188	−33,704	1,651,484		1,651,484
Shenandoah Valley, Virginia	2,500,000	−196,698	2,303,302	−297,126	2,006,176	−40,124	1,966,053		1,966,053
Shreveport, Louisiana	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Silicon Valley, California	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Southeast Michigan	2,000,000	−157,358	1,842,642	−237,701	1,604,941	−32,099	1,572,842		1,572,842
Spokane, Washington	500,000	−39,340	460,660	−59,425	401,235	−8,025	393,211		393,211

St. Louis, Missouri	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
State of Alabama	1,300,000	−102,283	1,197,717	−154,506	1,043,212	−20,864	1,022,347	40,000	982,347
State of Alaska	3,000,000	−236,038	2,763,962	−356,551	2,407,411	−48,148	2,359,263	TBD	2,359,263
State of Arizona	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421	786,421	
State of Colorado	1,500,000	−118,019	1,381,981	−178,276	1,203,706	−24,074	1,179,632	1,179,632	
State of Delaware	2,000,000	−157,358	1,842,642	−237,701	1,604,941	−32,099	1,572,842		1,572,842
State of Idaho	2,000,000	−157,358	1,842,642	−237,701	1,604,941	−32,099	1,572,842	393,211	1,179,631
State of Illinois	1,500,000	−118,019	1,381,981	−178,276	1,203,706	−24,074	1,179,632		1,179,632
State of Maryland	2,000,000	−157,358	1,842,642	−237,701	1,604,941	−32,099	1,572,842	900,000	672,842
State of Minnesota	7,000,000	−550,754	6,449,246	−831,953	5,617,293	−112,346	5,504,947		5,504,947
State of Montana	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421	786,421	
State of Nebraska	500,000	−39,340	460,660	−59,425	401,235	−8,025	393,211		393,211
State of Oregon	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
State of Texas	4,000,000	−314,717	3,685,283	−475,402	3,209,882	−64,198	3,145,684	TBD	3,145,684
State of Vermont, Rural Systems	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
State of New Jersey and New York	2,000,000	−157,358	1,842,642	−237,701	1,604,941	−32,099	1,572,842		1,572,842
Statewide Transcom/Transmit, NJ	4,000,000	−314,717	3,685,283	−475,402	3,209,882	−64,198	3,145,684		3,145,684
Tacoma Puvallup, Washington	500,000	−39,340	460,660	−59,425	401,235	−8,025	393,211		393,211
Thurston, Washington	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Towamencin, Pennsylvania	600,000	−47,208	552,792	−71,310	481,482	−9,630	471,853		471,853
Wausau-Stevens Pt. Wisc. Rapids, Wi	1,500,000	−118,019	1,381,981	−178,276	1,203,706	−24,074	1,179,632		1,179,632
Wayne County, Michigan	1,000,000	−78,679	921,321	−118,850	802,470	−16,049	786,421		786,421
Project Evaluations						1,923,522	1,923,522		1,923,522
GRAND TOTAL	122,650,000	−9,650,000	113,000,000	−14,577,000	98,423,000		98,423,000	7,297,106	91,125,894

[1] Reduction (11.7 percent).
[2] Reduction (2 percent).

CVO OUTREACH

Question. Please specify the amounts that were spent or will be spent on outreach related to CVO during fiscal year 1999, fiscal year 2000, and fiscal year 2001. What were the purposes of each activity and what was achieved? Please break down in detail your current or expected use of those monies on a project-by-project basis for fiscal year 1999.

Answer. In fiscal year 1999, the FMCSA spent nearly $110,000 of ITS funds on outreach related to CVO. These funds were used to maintain the portable ITS/CVO kiosk and to ship it to and from 22 different requesters' sites ($45,000); to produce 250 compact disk versions of the portable ITS/CVO kiosk ($30,000); to replace a damaged ITS/CVO kiosk ($26,000); and to maintain the ITS/CVO website for document uploads and conversions ($8,000). No fiscal year 2000 or fiscal year 2001 ITS funds will be spent on the ITS/CVO kiosk.

In fiscal year's 2000 and 2001, the CVO program will coordinate outreach activities with the ITS Joint Program Office as part of the overall ITS program. Funds will be used, as part of the overall program, to provide CVO stakeholders printed publications, training materials, exhibit materials and presentations, as well as the linkage of the ITS CVO website to the ITS JPO website.

CVO MONIES ALLOCATED

Question. Please break out in extensive detail how all of the CVO monies are expected to be allocated during fiscal year 2000. Please specify funds for all research, development, training, business plans, earmarks, operational tests, and IVI projects.

Answer. The information on how all of the CVO funds for research, development, training, and operational tests are expected to be allocated during fiscal year 2000 is provided in the table below. We do not anticipate using any fiscal year 2000 CVO funds for business plans or IVI projects.

Research and Development:	
Safety Data Systems	$2,650,000
CVISN Support for Level 1 Deployment	1,200,000
Roadside Identification Technology	350,000
Architecture Consistency	1,245,000
Training	900,000
CVISN Pilots	2,000,000

In fiscal year 2000, the states identified in the table below, were selected by Congress to receive federal ITS earmarks. The table shows the fiscal year 2000 earmark, the total adjusted amount of federal ITS funds available to the state, and the amount of funds the state has agreed to use for supporting CVISN deployment.

State	Fiscal year 2000 earmark	Adjusted total available	Amount for CVISN
Alabama	$1,300,000	$1,022,347	$40,000
Alaska	3,000,000	2,359,263	([1])
Arizona	1,000,000	786,421	786,481
Colorado	1,500,000	1,179,632	1,179,632
Delaware	2,000,000	1,572,842	.....
Idaho	2,000,000	1,572,842	393,211
Illinois	1,500,000	1,179,632	.....
Maryland	2,000,000	1,572,842	900,000
Minnesota	7,000,000	5,504,947	([2])
Montana	1,000,000	786,421	786,421
Nebraska	500,000	393,211	([3])
New Mexico-Santa Teresa	1,000,000	786,421	786,421
New York/New Jersey	2,000,000	1,572,842	.....
Oregon	1,000,000	786,421	.....
Texas	4,000,000	3,145,684	([1])
Vermont	1,000,000	786,421	.....
Virginia	4,000,000	3,145,684	2,425,000

[1] To be determined.

[2] Minnesota used its fiscal year 1999 earmark to fully fund CVISN deployment. The state will not use any of its fiscal year 2000 earmark for CVISN deployment.

[3] Nebraska is using its own state funds to support activities related to CVISN deployment in fiscal year 2000.

ITS SPENDING PLANS

Question. Please prepare comparable fiscal year 2000 and requested fiscal year 2001 spending plans to demonstrate how and whether program continuity and completion of projects will be achieved.

Answer.

FISCAL YEAR 1999 SPENDING PLAN FUNDING SOURCES AND BALANCES

[In thousands of dollars]

Activity/project	Fiscal year 1999	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
RESEARCH AND DEVELOPMENT	35,976	1,347	30	37,353	36,314	1,039
TRAFFIC MANAGEMENT AND CONTROL	4,637	1,001	30	5,668	5,654	14
Advanced Traffic Mgmt. Research	265	375	.....	640	640	.....
Adaptive Control System	265	375	.....	640	640	.....
Chicago Evaluation	15	.....	.....	15	15	.....
Ramp Metering	250	375	.....	625	625	.....
Models	3,410	625	30	4,065	4,065	.....
TReL	2,030	.....	30	2,060	2,060	.....
DES	1,310	.....	.....	1,310	1,310	.....
Onsite Support	720	.....	30	750	750	.....
TSIS—Enhancement and Maintenance	850	.....	.....	850	850	.....
TRANSIM	.....	500	.....	500	500	.....
Dynamic Traffic Assignment (DTA) System	150	125	.....	275	275	.....
Lab Evaluation	150	.....	.....	150	150	.....
Site Testing	.....	125	.....	125	125	.....
Computer Aided Design for Traffic Management Centers	380	.....	.....	380	380	.....
ITS Deployment Analysis System (IDAS)	450	.....	.....	450	450	.....
Other	512	1	.....	513	499	14
ATMS Research Support Services	298	.....	.....	298	298	.....
Capacity and Level of Service	50	.....	.....	50	50	.....
Websites	8	.....	.....	8	8	.....
ATMS Models Workshop	5	.....	.....	5	5	.....
Stand Alone Prediction Model	35	.....	.....	35	35	.....
Support Services for FHWA Human Factors	200	.....	.....	200	200	.....
Publications	84	.....	.....	84	84	.....
Turner-Fairbank Technical Support	65	.....	.....	65	65	.....
Other	24	1	.....	25	25	.....
IPA—Rudy Persaud, South Dakota DOT	40	.....	.....	40	26	14
INTELLIGENT VEHICLE RESEARCH	20,924	1	.....	20,925	20,431	494
Generation 0	8,859	.....	.....	8,859	8,859	.....
Performance Specifications	1,650	.....	.....	1,650	1,650	.....
Objective Test Metrics	.....	.....	.....	.....	.....	.....
Driver Performance Data Collection Field Tests	1,650	.....	.....	1,650	1,650	.....
Generation 0 Field Tests	6,400	.....	.....	6,400	6,400	.....
Generation 0 Field Tests	6,000	.....	.....	6,000	6,000	.....
Evaluations—0 Field Tests	400	.....	.....	400	400	.....
Cross-Cutting	809	.....	.....	809	809	.....
Special Vehicle Needs Assessment	309	.....	.....	309	309	.....
Develop C/B Methodology	500	.....	.....	500	500	.....
Generation 1	9,499	.....	.....	9,499	9,499	.....
Performance Specifications	3,549	.....	.....	3,549	3,549	.....
Rear-end Performance Specifications	601	.....	.....	601	601	.....
Roadway Departure Performance Specifications	250	.....	.....	250	250	.....
Lane Change/Merge Performance Specifications	150	.....	.....	150	150	.....
Int. and Fleet Test of Safety Critical Systems	600	.....	.....	600	600	.....
Drowsy Driver DVI	100	.....	.....	100	100	.....
EBS	150	.....	.....	150	150	.....

Test Multi Trailer Stability—Reaward Amp. Suppression Sys.	498			498	498	
Transit LC/M Performance Specifications	300			300	300	
Transit Rear End Performance Specifications	550			550	550	
Transit Rear Impact Performance Specifications	350			350	350	
Field Tests	5,550			5,550	5,550	
Rear-end CAS Field Test	4,850			4,850	4,850	
Drowsy Driver Field Test (NHTSA)	600			600	600	
Drowsy Driver Field Test (MCS)	100			100	100	
Cross-Cutting	400			400	400	
Lane Change Workshop	150			150	150	
HF Multi System Integration	250			250	250	
Generation 2	499			499	499	
Performance Specifications	250			250	250	
Vision Enhancement Performance Specifications						
Intersection Performance Specifications	250			250	250	
Cross-Cutting	249			249	249	
Sensor Friendly Roadway	249			249	249	
Support	2,066	1		2,067	1,573	494
TRB Review	175			175	175	
Program Support (Incl. Mitretek)	494			494		494
NHTSA Support	400			400	400	
Transit Support	150			150	150	
Human Factors Support	367	1		368	368	
Turner-Fairbank Technical Support	88			88	88	
ITS America	87			87	87	
Publications	305			305	305	
AHS Lessons Learned						
Adjustments Required						
RURAL RESEARCH	985	122		1,107	610	497
Rural ITS Support	407	119		526	526	
Decision Support Systems						
Rural Conference	30			30	30	
Peer-to-Peer						
Publications, etc						
Turner-Fairbank Technical Support	44			44	44	
Rural Weather Show		3		3	3	
Manassas Intersection Coll. Warning Sys	7			7	7	
Rural PR's for No Cost Contract Modifications						
Rural/Weather Requirements	497			497		497
APTS RESEARCH	988			988	988	
Advanced Fleet Management Research	400			400	400	
Traveler Information & ADA Compatibility	180			180	180	
Welfare to Work (Planning)	200			200	200	
General and Technical Staff Support	200			200	200	
Publications	8			8	8	
COMMERCIAL VEHICLE OPERATIONS	7,192	100		7,292	7,268	24
Safety Data Systems (Includes 3rd Mailbox)	3,005			3,005	3,005	
CVISN Support for Level 1 Deployment	1,600			1,600	1,600	
Architecture Consistency	1,000	100		1,100	1,100	
Architecture Consistency (Other)	800			800	800	
Freight Arch. Consistency	200	100		300	300	
CVO Technical Assistance	500			500	476	24
CVO Technical Assistance—(Other)	350			350	326	24
CVO Technical Assistance—Freight	150			150	150	
CVISN Technical Training	998			998	998	
Publications	89			89	89	
INTERMODAL FREIGHT RESEARCH	500	10		510	500	10
Operational Test—Facilitate Movement of Intermodal Freight	500			500	500	
TRB Conference on Intermodal Freight		10		10		10
ENABLING RESEARCH	600	114		714	714	
DSRC Spectrum Issues	450	58		508	508	

Spectrum Consulting Services	150	50	.....	200	200	.....
Publications	.....	1	.....	1	1	.....
State & Local Use of GPS	.....	5	.....	5	5	.....
FREIGHT RESEARCH	150	.....	.....	150	150	.....
OPERATIONAL TESTS	7,080	2,089	724	9,894	5,040	4,854
APTS OPERATIONAL TESTS	1,000	.....	.....	1,000	1,000	.....
Electronic Payment System for Transit & Other App	1,000	.....	.....	1,000	1,000	.....
CVO OPERATIONAL TESTS	2,000	1,000	.....	3,000	2,890	110
CVISN Pilots	2,000	1,000	.....	3,000	2,890	110
RURAL OPERATIONAL TESTS	2,289	361	.....	2,650	1,150	1,500
National Park ServiceField Operational Test	639	361	.....	1,000	.....	1,000
Emergency Services Field Operational Test	650	.....	.....	650	650	.....
Rural Transit Coordination Field Operational Test	500	.....	.....	500	500	.....
Multistate Traveler Information	500	.....	.....	500	.....	500
OPERATIONAL TESTS CONTINGENCIES	1,791	728	724	3,244	.....	3,244
EVALUATION/PROGRAM ASSESSMENT	5,510	634	.....	6,145	6,145	.....
EVALUATIONS	3,558	634	.....	4,192	4,192	.....
MMDI	626	17	.....	643	643	.....
CVISN	500	.....	.....	500	500	.....
FOT Crosscutting Analyses	567	483	.....	1,050	1,050	.....
Rural FOT's	805	.....	.....	805	805	.....
Intermodal Freight Evaluation	150	.....	.....	150	150	.....
APTS Field Operational Test Evaluations	200	.....	.....	200	200	.....
APTS Field Operational Test Evaluations	160	.....	.....	160	160	.....
APTS Operational Tests Evaluations (FTA)	40	.....	.....	40	40	.....
Highway-Rail Evaluations	100	.....	.....	100	100	.....
ADUS Support	200	75	.....	275	275	.....
Publications	.....	59	.....	59	59	.....
JPL Support	410	.....	.....	410	410	.....
PROGRAM ASSESSMENT	1,952	.....	.....	1,952	1,952	.....
ITS Deployment Tracking	755	.....	.....	755	755	.....
Metro	650	.....	.....	650	650	.....
Rural	.....	.....	.....	.....	.....	.....
CVISN Deployment Tracking	105	.....	.....	105	105	.....
JPL Support—Program Tracking	50	.....	.....	50	50	.....
ITS Policy Assessment	1,147	.....	.....	1,147	1,147	.....
Volpe Support to Assessment	880	.....	.....	880	880	.....
MMDI Expectations & Final Report	300	.....	.....	300	300	.....
ATIS Conference	100	.....	.....	100	100	.....
CVISN Institutional Issues Final Repo	50	.....	.....	50	50	.....
Review CVISN Business Practices	100	.....	.....	100	100	.....
MMDI Customer Satisfaction Guidance	50	.....	.....	50	50	.....
Analytical Support for Metropolitan Tracking	50	.....	.....	50	50	.....
Volpe B/C of MMDI	230	.....	.....	230	230	.....
Evaluation Guidelines Support	.....	.....	.....	.....	.....	.....
Volpe Support to Director JPO	267	.....	.....	267	267	.....
National Program Plan	155	.....	.....	155	155	.....
General Policy Support	.....	.....	.....	.....	.....	.....
ALERT	50	.....	.....	50	50	.....
SENTRI	62	.....	.....	62	62	.....
ARCHITECTURE AND STANDARDS	14,429	23	.....	14,452	13,702	750
ARCHITECTURE	5,630	23	.....	5,653	5,533	120
Architecture Deployment/Implementation Support	2,825	23	.....	2,848	2,848	.....
Deployment/Implementation Support	800	.....	.....	800	800	.....
Architecture Standards Development Support	800	.....	.....	800	800	.....
Architecture Data Base/Configuration Control Support	500	.....	.....	500	500	.....
Architecture Documentation (CD ROM/Web/Doc/Printing)	98	.....	.....	98	98	.....
Architecture Tool Development (Turbo Architecture)	377	23	.....	400	400	.....
Architecture Consistency Support	250	.....	.....	250	250	.....
Rural User Service Architecture Development Efforts	400	.....	.....	400	400	.....
Planning Data/Archiving Architecture Changes	399	.....	.....	399	399	.....

Architecture Eng. Maint. Support	285	.....	.....	285	285	.....
Architecture Training (Deployment and Implementation Tng.)	926	.....	.....	926	926	.....
CVO Architecture	675	.....	.....	675	675	.....
CVO Architecture—Other	375	.....	.....	375	375	.....
CVO Architecture—Freight	300	.....	.....	300	300	.....
Publications	.....	1	.....	1	1	.....
Turbo Architecture	120	.....	.....	120	.....	120
STANDARDS	8,799	.....	.....	8,799	8,169	630
Research and Development	594	.....	.....	594	594	.....
In-vehicle ICON	594	.....	.....	594	594	.....
STANDARDS DEVELOPMENT	4,150	.....	.....	4,150	4,020	130
Infrastructure and Safety	1,290	.....	.....	1,290	1,290	.....
Infrastructure and Safety	1,190	.....	.....	1,190	1,190	.....
Standards Strategic Plan	100	.....	.....	100	100	.....
CVO (EDI)	500	.....	.....	500	500	.....
Transit	1,200	.....	.....	1,200	1,200	.....
ISO TC 204 WG 8 Support via Volpe	150	.....	.....	150	150	.....
Multi-Use Smart Card Guidelines/Specs	300	.....	.....	300	300	.....
Other Transit Standards	550	.....	.....	550	550	.....
Transit Standards Consortium to TSC	200	.....	.....	200	200	.....
Rail Standards Development	200	.....	.....	200	70	130
Architectural Support	200	.....	.....	200	200	.....
JPL	760	.....	.....	760	760	.....
TESTING AND INTEROPERABILITY	2,300	.....	.....	2,300	2,300	.....
Interoperability Testing Support	1,800	.....	.....	1,800	1,800	.....
Data Registration	500	.....	.....	500	500	.....
IMPLEMENTATION	1,255	.....	.....	1,255	1,255	.....
Resource Materials	670	.....	.....	670	670	.....
Lessons Learned	300	.....	.....	300	300	.....
Evaluation of Standards Implementation	285	.....	.....	285	285	.....
STANDARDS CONTINGENCIES	500	.....	.....	500	.....	500
INTEGRATION	5,676	925	681	7,282	5,325	1,957
TECHNICAL ASSISTANCE	2,950	142	456	3,548	2,516	1,032
Information and Technology Transfer	1,358	142	65	1,565	1,566	.....
Specifications and Contract Management	100	.....	.....	100	100	.....
Work Program Scoping Effort	.....	.....	.....	.....	.....	.....
S&C Management Product Development	100	.....	.....	100	100	.....
Tailored Technical Assistance	800	50	.....	850	850	.....
Peer-to-Peer	.....	50	.....	50	50	.....
Service Plan Support	800	.....	.....	800	800	.....
Service Plan Support—Transfer to Resource Centers	696	.....	.....	696	696	.....
Other Service Plan Projects (NHI Training Courses)	104	.....	.....	104	104	.....
DTAG, RTAG, APTS Stakeholders	100	.....	.....	100	100	.....
FTA—DTAG, RTAG< APTS Stakeholders	100	.....	.....	100	100	.....
Quick Response	8	.....	.....	8	8	.....
Contracts Support	70	.....	.....	70	70	.....
Concept of Operation for TMC's (A Cook book)	100	.....	.....	100	100	.....
Case Studies	180	.....	.....	180	180	.....
Technology for Surveillance and Detection	120	.....	.....	120	120	.....
ITS Work Zone Applications	60	.....	.....	60	60	.....
Morgan Room Support	.....	92	45	137	137	.....
GMC ITS Priority Corridor Information Clearinghouse	.....	.....	20	20	20	.....
Transit Technical Assistance	950	.....	.....	950	950	.....
Technical Asst. to Transit Authorities	225	.....	.....	225	225	.....
Peer-to-Peer Program Support	125	.....	.....	125	125	.....
ITSA APTS Info. Exchange & Program Development	100	.....	.....	100	100	.....
APTS Mobile Showcase	500	.....	.....	500	500	.....
Systems Engineering Guidance Documents	100	.....	.....	100	.....	100

P.B. Farradyne IQC	.....	.....	391	391	.....	391
PTI Earmark	442	.....	.....	442	.....	442
AASHTO Steering Group for Technology Deployment	100	.....	.....	100	.....	100
PLANNING/POLICY	450	.....	.....	450	350	100
Management and Operations in Planning	350	.....	.....	350	350	.....
Management & Operations Product Development	350	.....	.....	350	350	.....
Traveler Response to Advanced Travel Information	100	.....	.....	100	.....	100
FHWA—Traveler Response to Advanced Travel Information	50	.....	.....	50	.....	50
FTA—Traveler Response to Advanced Travel Information	50	.....	.....	50	.....	50
TRAINING	1,559	747	225	2,531	1,931	600
Delivery	615	735	225	1,575	1,450	125
ITS Software Acquisition	40	.....	.....	40	30	10
Lessons in Procurement	.....	.....	225	225	225	.....
CORSIM	15	.....	.....	15	.....	15
Continuation of Existing Courses	160	.....	.....	160	160	.....
Delivery of Materials	.....	35	.....	35	35	.....
Standards (NTCIP, TCIP)	.....	700	.....	700	700	.....
Standards (NTCIP, TCIP)—FHWA	.....	384	.....	384	384	.....
Standards (NTCIP–TCIP)—FTA	.....	316	.....	316	316	.....
Distance Learning Pilots	350	.....	.....	350	300	50
Architecture Training Course (Field Travel, etc.)	50	.....	.....	50	.....	50
New Course Development	500	.....	.....	500	300	200
FHWA—New Course Development	200	.....	.....	200	.....	200
FTA—New Course Development	300	.....	.....	300	300	.....
Update Existing Materials	33	12	.....	45	45	.....
Update Existing Materials—FHWA	23	12	.....	35	35	.....
Update Existing Material—Transfer to FTA	10	.....	.....	10	10	.....
Support at NHI	161	.....	.....	161	136	25
Consultant Management	250	.....	.....	250	.....	250
OUTREACH AND COMMUNICATIONS	717	37	.....	754	528	225
Shipping and Handling Exhibits	117	17	.....	134	134	.....
New Exhibit Development	125	.....	.....	125	125	.....
National Associations Working Group (NAWG)	150	20	.....	170	170	.....
National Governors' Association Initiative	100	.....	.....	100	100	.....
JPO Web-Based Activities	225	.....	.....	225	.....	225
ITS Cooperative Deployment Network	225	.....	.....	225	.....	225
PROGRAM SUPPORT	8,566	674	226	9,465	5,494	3,971
ITS AMERICA	2,777	.....	.....	2,777	2,775	2
ITS AMERICA—Regular Contract	2,500	.....	.....	2,500	2,500	.....
Development of a Strategic Plan—ITS America	247	.....	.....	247	247	.....
ITSA Annual Meeting (Registration Fees)	30	.....	.....	30	27	3
MITRETEK	4,970	530	217	5,717	1,811	3,906
JPL SUPPORT	380	.....	.....	380	380	.....
MISCELLANEOUS TECHNICAL SUPPORT	86	.....	.....	86	86	.....
Kan Chen	11	.....	.....	11	11	.....
MITRE (Chadwick)	75	.....	.....	75	75	.....
GENERAL PROGRAM SUPPORT	352	144	9	505	442	63
C&P Contractual Support	150	.....	.....	150	150	.....
Columbia Services Computer Support	28	.....	.....	28	28	.....
Arrowhead Industries	96	.....	.....	96	96	.....
Other Misc. Program Support	33	81	9	123	123	.....
FCC Shared Resources	45	.....	.....	45	45	.....
TASC—Traveler Information Center	.....	35	.....	35	.....	35
Unfunded Interest Payments	.....	28	.....	28	.....	28
ITS DEPLOYMENT INCENTIVES	92,715	2,610	3,522	98,847	71,929	26,918
FISCAL YEAR 1998 CONGRESSIONAL EARMARKS	.....	2,610	3,522	6,132	3,563	2,569
Northeast Corridor	.....	110	3,522	3,632	2,563	1,069
Commercial Vehicle Operations, I–5 California	.....	1,500	.....	1,500	.....	1,500
Dade County Expressway, Florida Toll Collection System	.....	1,000	.....	1,000	1,000	.....
Rennselaer Polytechnical Institute (RPI)	.....	.....	.....	.....	.....	.....
FISCAL YEAR 1999 CONGRESSIONAL EARMARKS—TEA–21	7,802	.....	.....	7,802	7,052	750

Great Lakes ITS Implementation	1,583	.....	.....	1,583	1,583	.....
Northeast ITS Implementation	3,957	.....	.....	3,957	3,207	750
Hazardous Materials Monitoring Systems	1,211	.....	.....	1,211	1,211	.....
Translink—Texas Transportation Institute	1,050	.....	.....	1,050	1,050	.....
FISCAL YEAR 1999 CONGRESSIONAL EARMARKS—APPNS	83,104	.....	.....	83,104	59,505	23,599
Amherst, Massachusetts	791	.....	.....	791	.....	791
Arlington County, Virginia	594	.....	.....	594	594	.....
Atlanta, Georgia	1,583	.....	.....	1,583	1,583	.....
Brandon, Vermont	297	.....	.....	297	297	.....
Buffalo, New York	396	.....	.....	396	396	.....
Centre Valley, Pennsylvania	396	.....	.....	396	.....	396
Cleveland, Ohio	791	.....	.....	791	791	.....
Columbus, Ohio	791	.....	.....	791	791	.....
Corpus Christi, Texas	712	.....	.....	712	712	.....
Dade County, Florida	791	.....	.....	791	.....	791
Del Rio, Texas	791	.....	.....	791	791	.....
Delaware River, Pennsylvania	791	.....	.....	791	.....	791
Fairfield, California	791	.....	.....	791	791	.....
Fitchburg, Massachusetts	396	.....	.....	396	396	.....
Greater Metro. Region—DC	3,957	.....	.....	3,957	3,957	.....
Hammond, Louisiana	3,166	.....	.....	3,166	.....	3,166
Houston, Texas	1,583	.....	.....	1,583	1,583	.....
Huntington Beach, California	791	.....	.....	791	791	.....
Huntsville, Alabama	791	.....	.....	791	791	.....
Inglewood, California	1,187	.....	.....	1,187	1,187	.....
Jackson, Mississippi	791	.....	.....	791	791	.....
Kansas City, Missouri	396	.....	.....	396	396	.....
Laredo, Texas	791	.....	.....	791	791	.....
Middlesboro, Kentucky	2,374	.....	.....	2,374	2,374	.....
Mission Viejo, California	791	.....	.....	791	.....	791
Mobile, Alabama	1,979	.....	.....	1,979	1,979	.....
Monroe County, New York	317	.....	.....	317	317	.....
Montgomery, Alabama	989	.....	.....	989	989	.....
Nashville, Tennessee	396	.....	.....	396	396	.....
New Orleans, Louisiana	1,187	.....	.....	1,187	.....	1,187
New York City, New York	1,979	.....	.....	1,979	1,979	.....
New York/Long Island, New York	1,820	.....	.....	1,820	1,820	.....
Oakland County, Michigan	791	.....	.....	791	791	.....
Onandaga County, New York	317	.....	.....	317	.....	317
Port Angeles, Washington	396	.....	.....	396	396	.....
Raleigh-Wake County, North Carolina	1,583	.....	.....	1,583	1,583	.....
Riverside, California	791	.....	.....	791	791	.....
San Francisco, California	1,187	.....	.....	1,187	1,187	.....
Scranton, Pennsylvania	791	.....	.....	791	.....	791
Silicon Valley, California	1,187	.....	.....	1,187	1,187	.....
Spokane, Washington	356	.....	.....	356	356	.....
Springfield, Virginia	396	.....	.....	396	396	.....
St. Louis, Missouri	594	.....	.....	594	594	.....
State of Alaska	1,187	.....	.....	1,187	350	837
Alaska—CVO Deployment	350	.....	.....	350	350	.....
Alaska—Metro/Rural	837	.....	.....	837	.....	837
State of Idaho	791	.....	.....	791	791	.....
Idaho—CVO Deployment	350	.....	.....	350	350	.....
Idaho—Metro/Rural	441	.....	.....	441	441	.....
State of Maryland—CVO Deployment	1,979	.....	.....	1,979	1,979	.....
State of Minnesota	5,619	.....	.....	5,619	5,619	.....
Minnesota—CVO Deployment	1,920	.....	.....	1,920	1,920	.....
Minnesota—Metro/Rural	3,699	.....	.....	3,699	3,699	.....
State of Mississippi	791	.....	.....	791	791	.....
Mississippi—CVO Deployment	350	.....	.....	350	350	.....
Mississippi—Metro/Rural	441	.....	.....	441	441	.....
State of Missouri	396	.....	.....	396	396	.....
Missouri—CVO Deployment	350	.....	.....	350	350	.....
Missouri—Metro/Rural	46	.....	.....	46	46	.....
State of Montana	554	.....	.....	554	554	.....
Montana—CVO Deployment	554	.....	.....	554	554	.....
Montana—Metro/Rural	.....	.....	.....	.....	.....	.....

State of Nevada	455	.....	.....	455	105	350
Nevada—CVO Deployment	350	.....	.....	350	.....	350
Nevada—Metro/Rural	105	.....	.....	105	105	.....
State of New Jersey	2,374	.....	.....	2,374	2,374	.....
New Jersey—CVO Deployment	350	.....	.....	350	350	.....
New Jersey—Metro/Rural	2,024	.....	.....	2,024	2,024	.....
State of New Mexico	791	.....	.....	791	791	.....
New Mexico—CVO Deployment	741	.....	.....	741	741	.....
New Mexico—Metro/Rural	50	.....	.....	50	50	.....
State of New York	1,979	.....	.....	1,979	1,312	667
New York—CVO Deployment	1,730	.....	.....	1,730	1,063	667
New York—Metro/Rural	249	.....	.....	249	249	.....
State of North Dakota	1,148	.....	.....	1,148	297	851
North Dakota—CVO Deployment	50	.....	.....	50	50	.....
North Dakota—Metro/Rural	1,098	.....	.....	1,098	247	851
North Dakota State University (ATAC)	247	.....	.....	247	247	.....
North Dakota State Univ.—ATAC	302	.....	.....	302	.....	302
Univ. of North Dakota—ATWIS	549	.....	.....	549	.....	549
Commonwealth of Pennsylvania	11,081	.....	.....	11,081	.....	11,081
CVO Deployment	350	.....	.....	350	.....	350
Metro/Rural	10,731	.....	.....	10,731	.....	10,731
State of Texas	791	.....	.....	791	791	.....
Texas—CVO Deployment	50	.....	.....	50	50	.....
Texas—Metro/Rural	741	.....	.....	741	741	.....
State of Utah	2,849	.....	.....	2,849	2,849	.....
Utah—CVO Deployment	200	.....	.....	200	200	.....
Utah—Metro/Rural	2,649	.....	.....	2,649	2,649	.....
State of Washington	1,583	.....	.....	1,583	1,583	.....
Washington—CVO Deployment	610	.....	.....	610	610	.....
Washington—Metro/Rural	973	.....	.....	973	973	.....
State of Wisconsin	1,187	.....	.....	1,187	1,187	.....
Wisconsin—CVO Deployment	350	.....	.....	350	350	.....
Wisconsin—Metro/Rural	837	.....	.....	837	837	.....
Temucula, California	198	.....	.....	198	198	.....
Tucson, Arizona	791	.....	.....	791	791	.....
Volusia County, Florida	791	.....	.....	791	.....	791
Warren County, Virginia	198	.....	.....	198	198	.....
Wausau-Stevens Point, Wisconsin	791	.....	.....	791	791	.....
Westchester/Putnam Counties, New York	396	.....	.....	396	396	.....
White Plains, New York	791	.....	.....	791	791	.....
EVALUATIONS OF EARMARKED PROJECTS	1,809	.....	.....	1,809	1,809	.....
NATIONAL ADVANCED DRIVER SIMULATOR	6,648	.....	.....	6,648	6,648	.....
GRAND TOTALS	176,600	8,303	5,183	190,086	150,596	39,489

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
RESEARCH AND DEVELOPMENT	40,901	1,149	.....	42,049	3,869	38,180
TRAFFIC MANAGEMENT AND CONTROL	6,200	14	.....	6,214	1,439	4,775
Dynamic Traffic Assignment (DTA) System	1,900	.....	.....	1,900	.....	1,900
Adaptive Control Systems Lite	250	.....	.....	250	.....	250
Pedestrian Detection	100	.....	.....	100	.....	100
Models	1,525	.....	.....	1,525	800	725
ITS Deployment Analysis System (IDAS)	175	.....	.....	175	50	125
ITS Deployment Analysis System (IDAS) Development	50	.....	.....	50	50	.....
ITS Deployment Analysis System (IDAS) Maintenance	125	.....	.....	125	.....	125
Traffic Software Integrated System (TSIS)	1,350	.....	.....	1,350	750	600

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Support for TSIS Version 5.0 Model Deployment	750	.....	.....	750	750	.....
CORSIMS Reengineering	600	.....	.....	600	.....	600
Traffic Research Lab.(TReL) Test Bed Devel. & Supp	1,537	.....	.....	1,537	320	1,217
Human Factors	555	.....	.....	555	220	335
Human Factors Computer Aided Design (CAD) for TMC's	220	.....	.....	220	220	.....
Advanced Traffic Mgmt. Systems (ATMS) Support	100	.....	.....	100	.....	100
Traffic Mgmt. Centers (TMC) Workshop	35	.....	.....	35	.....	35
Traffic Mgmt. Centers Consortium	200	.....	.....	200	.....	200
Archived Data User Service (ADUS) Case Studies	100	.....	.....	100	25	75
Other Research Items	233	14	.....	247	74	173
Ramp Metering (split funding)	43	.....	.....	43	43	.....
McTrans Beta Testing	50	.....	.....	50	.....	50
McTrans Reengineering Review	50	.....	.....	50	.....	50
Freeway Capacity	35	.....	.....	35	31	4
ITRAF Support	50	.....	.....	50	.....	50
Queue Measurement	5	.....	.....	5	.....	5
IPA—Rudy Persaud, South Dakota DOT	.....	14	.....	14	.....	14
INTELLIGENT VEHICLE RESEARCH	23,001	494	.....	23,495	758	22,736
Generation 0	5,500	.....	.....	5,500	.....	5,500
Generation 0 Operational Tests	4,500	.....	.....	4,500	.....	4,500
Generation 0 Field Test Evaluations	1,000	.....	.....	1,000	.....	1,000
Generation 1	10,335	.....	.....	10,335	.....	10,335
Rear-end Collision Avoidance System Field Test	4,250	.....	.....	4,250	.....	4,250
Rear-end Collision Avoidance System	1,400	.....	.....	1,400	.....	1,400
Rear-end Collision Avoidance System Test (NHTSA)	900	.....	.....	900	.....	900
Rear-end Collision Avoidance System Test (FHWA for NHTSA)	500	.....	.....	500	.....	500
Lane Change/Merge Collision Avoidance System	850	.....	.....	850	.....	850
Road Departure	2,250	.....	.....	2,250	.....	2,250
Road Departure Test (NHTSA)	1,750	.....	.....	1,750	.....	1,750
Road Departure Test (FHWA for NHTSA)	500	.....	.....	500	.....	500
Safety Impacting	335	.....	.....	335	.....	335
Safety Impacting Test (NHTSA)	300	.....	.....	300	.....	300
Safety Impacting Test (FHWA for NHTSA)	35	.....	.....	35	.....	35
EBS	250	.....	.....	250	.....	250
Drowsy Driver Field Test	1,000	.....	.....	1,000	.....	1,000
Drowsy Driver Field Test (NHTSA)	750	.....	.....	750	.....	750
Drowsy Driver Field Test (CVO)	250	.....	.....	250	.....	250
Enabling Research Consortium	4,090	.....	.....	4,090	.....	4,090
Forward Collision Warning	500	.....	.....	500	.....	500
Workload Metrics	600	.....	.....	600	.....	600
ED Map	1,500	.....	.....	1,500	.....	1,500
Transit Rear-end	550	.....	.....	550	.....	550
Multiple Systems Inegration Study	940	.....	.....	940	.....	940
FHWA Human Factors Research	425	.....	.....	425	64	361
In-Vehicle Information Systems Behavioral Model	65	.....	.....	65	64	1

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Effectiveness of Multi-turn Preview on Route Following Perf	5	.....	.....	5	.....	5
Comp. of Audio/Visual Icons for Sign Recognition	5	.....	.....	5	.....	5
Societal and Institutional Issues	100	.....	.....	100	.....	100
Develop Cost/Benefit Methodology	250	.....	.....	250	.....	250
Generation 2	1,300	.....	.....	1,300	.....	1,300
Intersection	800	.....	.....	800	.....	800
Intersection (NHTSA)	300	.....	.....	300	.....	300
Intersection (FHWA for NHTSA)	500	.....	.....	500	.....	500
Sensor Friendly Roadway	300	.....	.....	300	.....	300
Define Short Range Communication Needs	100	.....	.....	100	.....	100
Define Radionavigation Needs	100	.....	.....	100	.....	100
Support	1,351	494	.....	1,845	695	1,150
Showcase	400	.....	.....	400	.....	400
TRB Review	200	.....	.....	200	200	.....
NHTSA Support	400	.....	.....	400	.....	400
Transit IVI Technical Support	100	.....	.....	100	.....	100
Human Factors Support	155	.....	.....	155	.....	155
ITS America	96	.....	.....	96	1	95
IVI Program Support	.....	494	.....	494	494	.....
RURAL RESEARCH	2,350	497	.....	2,847	497	2,350
Integration of APTS with Employment Service Sys	300	.....	.....	300	.....	300
Rural Safety Services	600	.....	.....	600	.....	600
ACN/PSAP Integration	200	.....	.....	200	.....	200
E–911 Workshop	100	.....	.....	100	.....	100
Design of Variable Speed Limit (VSL) Sys	300	.....	.....	300	.....	300
Rural Information and Operations	1,450	.....	.....	1,450	.....	1,450
Development Decision Supp. Sys for Winter Maintenance	600	.....	.....	600	.....	600
Assimilation of Surface Condition & Weather Observ	200	.....	.....	200	.....	200
Sensors and Sensor Siting	250	.....	.....	250	.....	250
Refinement of Surface Transp. Weather Requirements	300	.....	.....	300	.....	300
Rural ITS Toolbox	100	.....	.....	100	.....	100
Rural/Weather Requirements	.....	497	.....	497	497	.....
APTS RESEARCH	750	.....	.....	750	.....	750
Fleet Management Expert System	300	.....	.....	300	.....	300
Demand Response Dispatch Algorithm	250	.....	.....	250	.....	250
Wireless Technology Analysis	.....	.....	.....	.....	.....	.....
Traveler Information and ADA Compatibility	.....	.....	.....	.....	.....	.....
ITS Rail Research	200	.....	.....	200	.....	200
CVO RESEARCH	7,500	134	.....	7,634	1,165	6,469
Safety Data Systems	2,650	.....	.....	2,650	1,041	1,609
CVISN Support for Level I Deployment	1,200	.....	.....	1,200	100	1,100
Roadside Identification Technology Research	350	.....	.....	350	.....	350
Architecture Consistency	1,245	.....	.....	1,245	.....	1,245
CVO Technical Assistance (Minnesota)	.....	24	.....	24	24	.....
CVISN Pilots	2,000	110	.....	2,110	.....	2,110
Available for Distribution	55	.....	.....	55	.....	55
INTERMODAL FREIGHT RESEARCH	750	10	.....	760	10	750
Harmonizing Freight Technology	300	.....	.....	300	.....	300
ITSA Support for Reston II Conference	150	.....	.....	150	.....	150

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
ITSA Support for Intermodal Frt. Tech. Working Group	150	.....	.....	150	.....	150
International Border Crossing Program Support	450	.....	.....	450	.....	450
IBC Program Support/IBC Architecture Update	365	.....	.....	365	.....	365
Conduct 2 IBC Planning and Deploy. Mtgs	85	.....	.....	85	.....	85
TRB Conference on Intermodal Freight	.....	10	.....	10	10	.....
ENABLING RESEARCH	350	.....	.....	350	.....	350
DSRC Spectrum Issues	300	.....	.....	300	.....	300
Support for FCC and ITSA	50	.....	.....	50	.....	50
OPERATIONAL TESTS	6,090	4,744	231	11,065	400	10,665
APTS OPERATIONAL TESTS	1,090	.....	.....	1,090	.....	1,090
Fleet Management Expert System	500	.....	.....	500	.....	500
Demand Response Algorithm	590	.....	.....	590	.....	590
ALERT (Capitol Beltway)	1,000	.....	.....	1,000	.....	1,000
RURAL OPERATIONAL TESTS	3,750	1,500	.....	5,250	400	4,850
Statewide PSAP	1,000	.....	.....	1,000	.....	1,000
New York Statewide PSAP	200	.....	.....	200	.....	200
Statewide PSAP	800	.....	.....	800	.....	800
Multi-agency Integration of Info Sys & Trans. Coord	1,000	.....	.....	1,000	.....	1,000
Rural Information and Operations	1,750	500	.....	2,250	.....	2,250
Multi-State Traveler Information	1,000	500	.....	1,500	.....	1,500
Road Weather Condition Forecasting	750	.....	.....	750	.....	750
Nat'l. Park Service FOT	.....	1,000	.....	1,000	400	600
INTERMODAL FREIGHT—OPERATIONAL TEST	250	.....	.....	250	.....	250
OPERATIONAL TESTS CONTINGENCIES	.....	3,244	231	3,475	.....	3,475
EVALUATION/PROGRAM ASSESSMENT	6,000	.....	.....	6,000	1,555	4,445
EVALUATIONS	2,860	.....	.....	2,860	536	2,324
Field Operational Tests Evaluations	1,135	.....	.....	1,135	240	895
Rural FOT Evaluations	570	.....	.....	570	.....	570
Intermodal Freight Evaluations	200	.....	.....	200	.....	200
APTS Field Operational Test Evaluations	365	.....	.....	365	240	125
Transit FOT Evaluations (Transfer to FTA)	240	.....	.....	240	240	.....
Transit FOT Evaluations (FHWA for FTA)	125	.....	.....	125	.....	125
Deployment Evaluations	1,025	.....	.....	1,025	296	729
Metropolitan Evaluations	500	.....	.....	500	104	396
CVISN Evaluations	425	.....	.....	425	192	233
Hwy.-Rail Evaluations	100	.....	.....	100	.....	100
Special Benefits Reports	700	.....	.....	700	.....	700
Crosscutting Analyses	700	.....	.....	700	.....	700
ITS Deployment Tracking	950	.....	.....	950	870	80
Metropolitan ITS Deployment Tracking for Fiscal Year 2000	600	.....	.....	600	600	.....
Rural Deployment Tracking	260	.....	.....	260	260	.....
CVISN Deployment Tracking for Fiscal Year 1998	90	.....	.....	90	10	80
Program Tracking	500	.....	.....	500	.....	500
ITS Policy Assessment	1,690	.....	.....	1,690	149	1,541
Analytical Support	800	.....	.....	800	.....	800
General Policy Assessment Support to the Director	890	.....	.....	890	149	741
ARCHITECTURE AND STANDARDS	14,000	750	.....	14,750	5,573	9,177
ARCHITECTURE	5,000	120	.....	5,120	4,309	811
Architecture Deployment/Implementation Support	2,590	.....	.....	2,590	2,590	.....

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Deployment/Implementation Support	1,140	.....	.....	1,140	1,140	.....
Architecture Standards Development Support	700	.....	.....	700	700	.....
Architecture Support of Standards Testing	100	.....	.....	100	100	.....
Architecture Data Base/Configuration Control Support	500	.....	.....	500	500	.....
Architecture Documentation	100	.....	.....	100	100	.....
Architecture Tool Development	50	.....	.....	50	50	.....
Rural User Service/Architecture Changes	400	.....	.....	400	400	.....
Planning Data/Archiving User Service/Architecture Changes	100	.....	.....	100	100	.....
Weather User Service/Architecture Changes	50	.....	.....	50	50	.....
Intermodal Freight User Service/Architecture Changes	50	.....	.....	50	50	.....
Emergency Services User Services/Architecture Changes	25	.....	.....	25	25	.....
Regional Architecture Support, Peer to Peer	175	.....	.....	175	175	.....
Architecture Engineering Maintenance Support	315	.....	.....	315	.....	315
Architecture Training (Deployment and Implementation)	800	.....	.....	800	800	.....
CVO Architecture	490	.....	.....	490	.....	490
Invitational Travel—Beta Test Turbo Architecture	5	.....	.....	5	.....	5
Turbo Architecture	.....	120	.....	120	120	.....
STANDARDS	9,000	630	.....	500	1,264	8,366
Standards Development Activities	4,400	130	.....	4,530	130	4,400
Infrastructure and Safety	1,765	.....	.....	1,765	.....	1,765
Infrastructure & Safety	1,665	.....	.....	1,665	.....	1,665
Volpe	100	.....	.....	100	.....	100
CVO (EDI)	400	.....	.....	400	.....	400
Transit	1,055	.....	.....	1,055	.....	1,055
TCIP	335	.....	.....	335	.....	335
Transit Signal Priority	110	.....	.....	110	.....	110
Transit Profile for LRMS	110	.....	.....	110	.....	110
Smart Card	300	.....	.....	300	.....	300
ISO TC 204 WG 8 & WAG 8	200	.....	.....	200	.....	200
Rail	200	130	.....	330	130	200
FRA Support Devel. of Hwy.-Rail Intersection	.....	130	.....	130	130	.....
Rail	200	.....	.....	200	.....	200
Architecture Support	200	.....	.....	200	.....	200
JPL	780	.....	.....	780	.....	780
Mitretek	.....	.....	.....	.....	.....	.....
Testing and Interoperability	2,500	.....	.....	2,500	1,100	1,400
Interoperability Testing Support	1,700	.....	.....	1,700	1,100	600
Battelle	1,100	.....	.....	1,100	1,100	.....
DSRC	400	.....	.....	400	.....	400
LRS	200	.....	.....	200	.....	200
Data Registration	800	.....	.....	800	.....	800
Implementation	1,900	.....	.....	1,900	34	1,866
Resource Materials	500	.....	.....	500	34	466
Lessons Learned	500	.....	.....	500	.....	500
Technical Asst. (Peer to peer)	100	.....	.....	100	.....	100
Training	500	.....	.....	500	.....	500
Evaluation	300	.....	.....	300	.....	300
Conformity	200	.....	.....	200	.....	200
Rule Making	100	.....	.....	100	.....	100

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Policy Development	100	.....	.....	100	.....	100
Standards Contingencies	.....	500	.....	500	.....	500
INTEGRATION/MAINSTREAMING	9,414	1,957	.....	11,371	1,569	9,702
TECHNICAL ASSISTANCE	4,766	1,032	.....	5,798	1,361	4,437
Direct Technical Assistance	1,725	.....	.....	1,725	377	1,348
Service Plan Implementation	1,500	.....	.....	1,500	377	1123
Service Plan Implementation	798	.....	.....	798	377	421
Non-Targeted Funding Allotted to Resource Centers ($312,000)	312	.....	.....	312	.....	312
Service Plan Funds Allotted to NHI	28	.....	.....	28	.....	28
Targeted Service Plan Funding Allotted to Divisions	363	.....	.....	363	.....	363
FHWA/FTA Peer to Peer Program	225	.....	.....	225	.....	225
Technical Guidance	1,855	100	.....	1,955	425	1,530
ITS Lessons Learned/Best Practices Series	400	.....	.....	400	.....	400
ITS Lessons Learned/Best Practices Series	325	.....	.....	325	.....	325
APTA Best Practices Workshops	75	.....	.....	75	.....	75
Technical Materials for Sys Eng	120	100	.....	220	100	120
APTS Showcase	960	.....	.....	960	300	660
APTS Showcase	300	.....	.....	300	300	.....
APTS Mobile Showcase (FHWA for FTA)	660	.....	.....	660	.....	660
National Architecture Use Guidelines	100	.....	.....	100	.....	100
Architecture Consistency Outreach	100	.....	.....	100	.....	100
Architecture Consistency Outreach	50	.....	.....	50	.....	50
Arch. Consistency Outreach Allotted to NHI ($50,000)	50	.....	.....	50	.....	50
ACS Outreach	100	.....	.....	100	.....	100
IDAS Outreach	75	.....	.....	75	25	50
Develop. of ATIS Data Collection Guidelines	230	.....	.....	230	194	36
Crosscutting	445	.....	.....	445	.....	445
Program Peer Review	445	.....	.....	445	.....	445
ITSA Transit	100	.....	.....	100	.....	100
APTS Stakeholder Forum	75	.....	.....	75	.....	75
TMAG	50	.....	.....	50	.....	50
FTA Technical Support	220	.....	.....	220	.....	220
AASHTO ITS Deployment Task Force	75	.....	.....	75	.....	75
URBAN CONSORTIUM	436	442	.....	877	224	653
PTI FISCAL YEAR 2000 Earmark—URBAN CONSORTIUM	436	.....	.....	436	.....	436
PTI Fiscal Year 1999 Earmark	.....	442	.....	442	224	217
PBFarradyne IQC	.....	391	.....	391	141	250
AASHTO Steering Group for Technology Deployment	.....	100	.....	100	.....	100
PLANNING/POLICY	500	100	.....	600	.....	600
Air Quality Impacts	200	.....	.....	200	.....	200
Planning Tools to Support ITS	300	.....	.....	300	.....	300
Traveler Response to Advanced Travel Information	.....	100	.....	100	.....	100
FHWA—Traveler Response to Adv. Travel Info	.....	50	.....	50	.....	50
FTA—Traveler Response to Adv. Travel Info	.....	50	.....	50	.....	50
TRAINING	3,350	600	.....	3,950	200	3,750
Deliver Current Courses	500	.....	.....	500	30	470

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Travel Management	500	.....	.....	500	30	470
Update Existing Courses	100	.....	.....	100	.....	100
Assist NHI and NTI with Continuing Update	100	.....	.....	100	.....	100
Develop New Instructional Material	1,250	.....	.....	1,250	.....	1,250
FTA Course—Data Management for Transit Agencies	200	.....	.....	200	.....	200
New Courses to Fill Gaps	300	.....	.....	300	.....	300
Develop Addtl. High Priority Courses	750	.....	.....	750	.....	750
Advanced WBT Course Development	250	.....	.....	250	100	150
Support Detailed Curricula Development & WBT Evaluation	250	.....	.....	250	100	150
Program Management & Support	350	.....	.....	350	.....	350
Onsite ISD Professional & Onsite Secretary	100	.....	.....	100	.....	100
Professional Training Spec. for NTI/FTE	150	.....	.....	150	.....	150
Volpe Support for PCB Web Page Development	100	.....	.....	100	.....	100
CVISN Technical Training	900	.....	.....	900	20	880
Consultant Management	.....	250	.....	250	.....	250
Distance Learning Pilots	.....	50	.....	50	50	.....
Training Funds Allocated to NHI	.....	.....	.....	.....	.....	.....
NHI Training Carryover from fiscal year 1999	.....	300	.....	300	.....	300
ITS Software Acquisition	.....	10	.....	10	.....	10
CORSIM	.....	15	.....	15	.....	15
Architecture Training Course	.....	50	.....	50	.....	50
FHWA—New Course Development	.....	200	.....	200	.....	200
Support at NHI	.....	25	.....	25	.....	25
OUTREACH AND COMMUNICATIONS	660	225	.....	885	.....	885
Publications (new and reprints)	250	.....	.....	250	.....	250
Publications (new and reprints)—Program Funding	250	.....	.....	250	.....	250
JPO Home Page	180	.....	.....	180	.....	180
ICDN	230	225	.....	455	.....	455
MAINSTREAMING	500	.....	.....	500	8	492
Shipping and Handling Exhibits	120	.....	.....	120	8	112
Exhibits (Creation/Maintenance)	80	.....	.....	80	.....	80
Outreach	300	.....	.....	300	.....	300
National Associations Working Group (NAWG)	100	.....	.....	100	.....	100
NGA Initiative	200	.....	.....	200	.....	200
PROGRAM SUPPORT	8,766	3,971	.....	12,737	4,546	8,192
ITS AMERICA	2,600	2	.....	2,602	600	2,002
MITRETEK	5,500	3,906	.....	9,406	3,906	5,500
JPL SUPPORT	380	.....	.....	380	.....	380
GENERAL PROGRAM SUPPORT	286	63	.....	349	40	309
Smart Technology	110	.....	.....	110	.....	110
Arrowhead Industries	130	.....	.....	130	.....	130
Other Misc. Program Support	46	.....	.....	46	40	6
TASC-Traveler Information Center	.....	35	.....	35	.....	35
Unfunded Interest Payments	.....	28	.....	28	.....	28
ITS DEPLOYMENT INCENTIVES	98,423	26,918	100	125,441	1,430	124,011
FISCAL YEAR 1998 CONGRESSIONAL EARMARKS	.....	2,569	100	2,669	639	2,030
Northeast Corridor (Various Proj)	.....	1,069	.....	1,069	639	430
Commercial Vehicle Operations, I–5 California	.....	1,500	.....	1,500	.....	1,500
National Inst. for Enviornmental Renewal (NIER)	.....	.....	100	100	.....	100
FISCAL YEAR 1999 CONGRESSIONAL EARMARKS	.....	24,349	.....	24,349	791	23,558

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Alaska	.....	837	.....	837	.....	837
Amherst, Massachusetts	.....	791	.....	791	.....	791
Centre Valley, Pa	.....	396	.....	396	.....	396
Dade County Florida	.....	791	.....	791	791	.....
Delaware River, Pa	.....	791	.....	791	.....	791
Hammond, Louisiana	.....	3,166	.....	3,166	.....	3,166
Mission Viejo, California	.....	791	.....	791	.....	791
Nevada—CVO Deployment	.....	350	.....	350	.....	350
New Orleans, Louisiana	.....	1,187	.....	1,187	.....	1,187
New York CVO Deployment	.....	667	.....	667	.....	667
North Dakota State Univ.—ATAC	.....	302	.....	302	.....	302
Northeast ITS Implementation	.....	750	.....	750	.....	750
CVO Northeast Corridor	.....	500	.....	500	.....	500
Tri-State Rural ATIS	.....	250	.....	250	.....	250
Onandaga County, New York	.....	317	.....	317	.....	317
Pennsylvania	.....	11,081	.....	11,081	.....	11,081
CVO Deployment	.....	350	.....	350	.....	350
Commonwealth of Pennsylvania	.....	10,731	.....	10,731	.....	10,731
Scranton, Pa	.....	791	.....	791	.....	791
University of North Dakota—ATWIS	.....	549	.....	549	.....	549
Volusia County, Florida	.....	791	.....	791	.....	791
FISCAL YEAR 2000 CONGRESSIONAL EARMARKS	88,748	.....	.....	88,748	.....	88,748
Albuquerque, New Mexico	1,573	.....	.....	1,573	.....	1,573
Arapahoe County, Colorado	786	.....	.....	786	.....	786
Branson, Missouri	786	.....	.....	786	.....	786
Central Pennsylvania	786	.....	.....	786	.....	786
Charlotte, North Carolina	786	.....	.....	786	.....	786
Chicago, Illinois	786	.....	.....	786	.....	786
City of Superior and Douglas County, Wisconsin	786	.....	.....	786	.....	786
Clay County, Missouri	236	.....	.....	236	.....	236
Clearwater, Florida	2,752	.....	.....	2,752	.....	2,752
College Station, Texas	786	.....	.....	786	.....	786
Central Ohio	786	.....	.....	786	.....	786
Commonwealth of Virginia	3,146	.....	.....	3,146	.....	3,146
Commonwealth of Virginia—CVO	.....	.....	.....	.....	.....	.....
Commonwealth of Virginia—Metro/Rural	3,146	.....	.....	3,146	.....	3,146
Corpus Christi, Texas	1,180	.....	.....	1,180	.....	1,180
Delaware River, Pennsylvania	786	.....	.....	786	.....	786
Fairfield, California	590	.....	.....	590	.....	590
Fargo, North Dakota	786	.....	.....	786	.....	786
Florida Bay County, Florida	786	.....	.....	786	.....	786
Fort Worth, Texas	1,966	.....	.....	1,966	.....	1,966
Grand Forks, North Dakota	393	.....	.....	393	.....	393
Greater Metro. Capital Region, DC	3,932	.....	.....	3,932	.....	3,932
Greater Yellowstone, Montana	786	.....	.....	786	.....	786
Houma, Louisiana	786	.....	.....	786	.....	786
Houston, Texas	1,180	.....	.....	1,180	.....	1,180
Huntsville, Alabama	393	.....	.....	393	.....	393
Inglewood, California	786	.....	.....	786	.....	786
Jefferson County, Colorado	1,180	.....	.....	1,180	.....	1,180
Kansas City, Missouri	786	.....	.....	786	.....	786
Las Vegas, Nevada	2,202	.....	.....	2,202	.....	2,202
Los Angeles, California	786	.....	.....	786	.....	786
Miami, Florida	786	.....	.....	786	.....	786
Mission Viejo, California	786	.....	.....	786	.....	786
Monroe County, New York	786	.....	.....	786	.....	786
Nashville, Tennessee	786	.....	.....	786	.....	786
Northeast Florida	786	.....	.....	786	.....	786
Oakland, California	393	.....	.....	393	.....	393

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Oakland County, Michigan	786			786		786
Oxford, Mississippi	1,180			1,180		1,180
Pennsylvania Turnpike, Pennsylvania	1,966			1,966		1,966
Pueblo, Colorado	786			786		786
Puget Sound, Washington	786			786		786
Reno/Tahoe, California/Nevada	393			393		393
Rensselaer County, New York	786			786		786
Sacramento County, California	786			786		786
Salt Lake City, Utah	2,359			2,359		2,359
San Francisco, California	786			786		786
Santa Clara, California	786			786		786
Santa Teresa, New Mexico	786			786		786
Seattle, Washington	1,651			1,651		1,651
Shenandoah Valley, Virginia	1,966			1,966		1,966
Shreveport, Louisiana	786			786		786
Silicon Valley, California	786			786		786
Southeast Michigan	1,573			1,573		1,573
Spokane, Washington	393			393		393
St. Louis, Missouri	786			786		786
State of Alabama	1,022			1,022		1,022
Alabama—CVO Deployment						
Alabama—Metro/Rural Deployment	1,022			1,022		1,022
State of Alaska	2,359			2,359		2,359
Alaska—CVO Deployment						
Alaska—Metro/Rural Deployment	2,359			2,359		2,359
State of Arizona	786			786		786
Arizona—CVO Deployment						
Arizona—Metro/Rural Deployment	786			786		786
State of Colorado	1,180			1,180		1,180
Colorado—CVO Deployment	1,180			1,180		1,180
Colorado—Metro/Rural Deployment						
State of Delaware	1,573			1,573		1,573
Delaware—CVO Deployment						
Delaware—Metro/Rural Deployment	1,573			1,573		1,573
State of Idaho	1,573			1,573		1,573
Idaho—CVO Deployment						
Idaho—Metro/Rural Deployment	1,573			1,573		1,573
State of Illinois	1,180			1,180		1,180
Illinois—CVO Deployment						
Illinois—Metro/Rural Deployment	1,180			1,180		1,180
State of Maryland	1,573			1,573		1,573
Maryland—CVO Deployment						
Maryland—Metro/Rural Deployment	1,573			1,573		1,573
State of Minnesota	5,505			5,505		5,505
Minnesota—CVO Deployment						
Minnesota—Metro/Rural Deployment	5,505			5,505		5,505
State of Montana	786			786		786
Montana—CVO Deployment	786			786		786
Montana—Metro/Rural Deployment						
State of Nebraska	393			393		393
Nebraska, CVO Deployment						
Nebraska—Metro/Rural Deployment	393			393		393
State of Oregon	786			786		786
Oregon—CVO Deployment						
Oregon—Metro/Rural Deployment	786			786		786
State of Texas	3,146			3,146		3,146
Texas—CVO Deployment						
Texas—Metro/Rural Deployment	3,146			3,146		3,146
State of Vermont Rural Systems	786			786		786
States of New Jersey and New York	1,573			1,573		1,573

FISCAL YEAR 2000 SPENDING PLAN FUNDING SOURCES AND BALANCES—Continued

[In thousands of dollars]

Activity/project	Fiscal year 2000	Prior year		Total available	Obligated	Unobligated
		Unobligated	Recoveries			
Statewide Transcom/Transmit Upgrades, New Jersey	3,146	.....	.....	3,146	.....	3,146
Tacoma Puyallup, Washington	393	.....	.....	393	.....	393
Thurston, Washington	786	.....	.....	786	.....	786
Towamencin, Pennsylvania	472	.....	.....	472	.....	472
Wausau-Stevens Point-Wisconsin Rapids, Wisconsin	1,180	.....	.....	1,180	.....	1,180
Wayne County, Michigan	786	.....	.....	786	.....	786
FISCAL YEAR 2000 CONGRESSIONAL EARMARKS—TEA–21	7,752	.....	.....	7,752	.....	7,752
Great Lakes ITS Implementation	1,573	.....	.....	1,573	.....	1,573
Northeast ITS Implementation	3,932	.....	.....	3,932	.....	3,932
Hazardous Materials Monitoring Systems	1,204	.....	.....	1,204	.....	1,204
Translink—Texas Transportation Institute	1,043	.....	.....	1,043	.....	1,043
EVALUATIONS OF EARMARKED PROJECTS	1,924	.....	.....	1,924	.....	1,924
GRAND TOTALS	183,955	39,489	331	223,775	18,942	204,833

SMART CARDS FOR COMMERCIAL DRIVERS LICENSES

Question. In the fiscal year 2000 conference report, the Committee requested that FHWA provide up to $1,000,000 for the testing and development of a smart commercial drivers license utilizing smart card and biometric elements to enhance safety and efficiency. What has FHWA done to implement that objective? How much will be allocated during fiscal year 2000 on those activities?

Answer. The FHWA began to implement this objective in 1996 with a study of the feasibility of smart cards for commercial drivers licenses. The study's final report concluded that: "Analysis shows that enhancing the CDL is most feasible through the use of a smart card for all drivers, not only commercial drivers. However, smart card tracking of hours of service was not found to be institutionally feasible. Although beneficial to law enforcement, smart card tracking of hours of service could be effectively opposed by drivers and carriers at several stages of system implementation." The American Association of Motor Vehicle Administrators is working to standardize smart card technology. One Canadian province is scheduled to issue smart cards beginning in calendar year 2001.

Currently, the FMCSA is evaluating the best biometric elements to uniquely identify a commercial driver. The FMCSA has a Cooperative Agreement with the California Department of Motor Vehicles to determine the optimum combination of fingerprint and facial images to best detect license fraud and the optimum communication protocol to exchange fingerprint images between states electronically. California is one of 3 states which will collect a total of 32,000 sample digital facial images and sets of fingerprints from volunteers. A random sample of records will be duplicated and sent to vendors to see if they can identify the duplicate records. The project started in fiscal year 1999 with $100,000 in research funds. Funding for fiscal year 2000 is $100,000 in Motor Carrier Safety Assistance Program funds and $100,000 Intelligent Transportation Systems/Commercial Vehicle Operations funds. The project is scheduled for completion in October 2001. No further funding for fiscal year 2001 is planned.

In addition the Office of Freight Management within FHWA is conducting an ITS freight operational test with the ATA Foundation and the Illinois DOT on a secure freight movement system in conjunction with an end-to-end electronic manifest system from manufacturer to customer. The overall cost of the system is $1.1 million, with $468 thousand federal funds and the rest from the state and private partnerships. The system will test biometric identifiers of all the handlers of the freight, including commercial motor carrier drivers. A smart card will be used with the fingerprint captured digitally for each individual responsible for the freight as it moves from origin to destination. The evaluation of this test, expected in 2001, will provide additional information on the success of using a "smart card and biometric elements to enhance safety and efficiency".

DEPLOYMENT OF CVISN LEVEL I

Question. FHWA states in the budget justification that in fiscal year 2001 you will complete the deployment of CVISN Level I in the 10 pilot states. What is the empirical basis of this projection? What could be done to help the Department achieve this milestone?

Answer. The budget justification states that CVISN is being developed and deployed using a building block approach, designed to achieve a 10-state CVISN network in fiscal year 2001. The empirical basis of this projection was: (1) these states completed their CVISN project plans and top-level designs in June 1997; (2) that it would take approximately 2 years to complete CVISN Level 1 deployment; and (3) that the funds necessary for these ten states to complete CVISN Level 1 deployment by fiscal year 2001 would be available. In fact, TEA–21 authorized a total of $184 million of federal ITS funds from FYs 1998–2003 to deploy CVISN in a majority of states by September 30, 2003. However, most of the federal ITS deployment funds originally intended to support CVISN deployment are being designated by Congress through the appropriations process to fund other ITS projects.

Both the ITS Joint Program Office and FMCSA have tried to supplement the deployment of CVISN by using R&D and MCSAP funds have used a limited amount of federal funds from the ITS and FMCSA programs to support CVISN deployment in the prototype and pilot states. In some instances, these states also received Congressional earmarks and used all or a portion of those funds to support their CVISN deployment activities. As a result, we expect Kentucky, Maryland, and Virginia to be deploying CVISN Level 1 capabilities by the end of fiscal year 2000, and California, Minnesota, and Washington to be completed by the end of fiscal year 2001. We also expect Colorado and Connecticut to be completed by the end of fiscal year 2002.

The FMCSA's and the FHWA's highest priority for the use of federal ITS deployment funds has been and will continue to be completing CVISN Level 1 deployment in the pilot states. The ability to direct federal ITS deployment funds to complete CVISN deployment in the remaining pilot states of Michigan and Oregon will provide the essential foundation for subsequent CVISN deployment of Level 1 capabilities across the nation. The ability to direct federal ITS deployment funds to states which are ready to begin CVISN deployment will help the Department achieve the Congressional goal of completing CVISN deployment in a majority of states by September 30, 2003. The lack of full federal ITS deployment funds for CVISN puts the FMCSA's, the FHWA's and the states' ability to meet the Congressional goal in jeopardy. It is not a matter of spending more money but one of either giving the Joint Program Office the discretion to focus the deployment funds on the states that are already in the process of deploying, or have Congress do that.

INTELLIGENT VEHICLE INITIATIVE (IVI)

Question. Please explain or justify the allocation between the amount of funds requested for research versus the amount requested for operational testing.

Answer. In the fiscal year 2001 budget request for IVI we have requested $30 million. $14.4 million for research, $11.6 million for field testing of longer term systems, and $4.6 million for the Generation Zero Operational Tests.

—The Research budget funds problem size and causality, functional analysis, performance specifications, human factors and estimation of benefits. This can be characterized by laboratory and test track work on systems which lack technical maturity.

—The field testing budget funds the test and evaluation of systems that we have a significant understanding of their technical performance, user acceptance and benefits. These systems are sufficiently mature to be evaluated in an operational environment but are not expected to be commercially available within the next five years because of cost, performance and institutional issues.

—The Generation Zero Operational Tests will evaluate systems which are expected to enter production preparation by 2003. The purpose of these tests is to measure their effectiveness on real roads with real drivers. This will allow us to measure the effectiveness as well as address any other obstacles to the deployment of safety impacting systems.

In order to achieve the near-term program goals without ignoring the increased benefits of more advanced systems, the program is focused on developing multiple generations of vehicles which have increasing capabilities. The generation vehicles will be developed in partnership with industry and stakeholders for the purpose of evaluating the benefits, technical capabilities and user acceptance of these systems. This arrangement allows the government research investment to influence the in-

dustries which must produce these systems as well as the individuals and organizations that will use them.

Fiscal year 2001 will be the fourth year of the IVI program. Fiscal year 1998 was spent on defining and organizing the program. In that limited budget year, we focused on developing the early services which were primarily developed under the predecessor programs to the IVI. In fiscal year 1999, we initiated a program to test and evaluate Generation 0 products (near market systems). The objective of this activity is to measure the effectiveness of these technologies. While this is in progress we will initiate field tests of some next generation services (Generation 1) and conduct longer term research of future generations (Generation 2 and beyond). All of this is conducted in a framework which was defined by an industry-stakeholder-government working group.

FUNDING UNDER IVI PROGRAM

Question. Please submit detailed spending plans of the activities funded under the IVI program for fiscal year 1999 and fiscal year 2000. Delineate expenditures related to the passenger platform.

Answer.

	Amount	
IVI FISCAL YEAR 1999 SPENDING PLAN		
Total	$20,923	
Generation 0:		
Performance Specifications:		
Objective Test Metrics	.....	Light Vehicle
Driver Performance Data Collection	$1,650	Light Vehicle
Field Tests: Generation 0 Field Tests	$6,400	
Cross-cutting:		
Special Vehicle Needs Assessment/HF	309	
Develop C/B methodology	500	Light Vehicle
Generation 1:		
Performance Specifications:		
Rear-end Performance Specifications	601	Light Vehicle
Roadway Departure Perf Specs	250	Light Vehicle
Lane Change/Merge Perf Specs	150	Light Vehicle
Int. and fleet test of safety Critical Sys	600	
Drowsy Driver DVI	100	
EBS	150	
Test Multi Trailer Stability	498	
Transit LC/M Perf Spec	300	
Transit Rear End Perf Specs	550	
Transit Rear Impact Perf Spec	350	
Field Tests:		
Rear-END CAS Field Test	4,850	Light Vehicle
Drowsy Driver Field Test	700	
Cross-cutting:		
Lane Change Workshop	150	Light Vehicle
HF Multi System Integration	250	Light Vehicle
Generation 2:		
Performance Specifications:		
Vision Enhancement Perf Spec	.....	Light Vehicle
Intersection Perf Specs	250	Light Vehicle
Cross-cutting: Sensor Friendly Roadway	249	Light Vehicle
Support:		
TRB Review	175	Light Vehicle
Program Support (Incl Mitretek)	494	Light Vehicle
NHTSA Support	400	Light Vehicle
Transit Support	150	
HF Support	367	Light Vehicle
TFHRC M&C	88	Light Vehicle

	Amount	
ITS America	87	Light Vehicle
Publications 2 percent	305	Light Vehicle
FISCAL YEAR 2000 IVI BUDGET		
RESEARCH AND DEVELOPMENT:		
INTELLIGENT VEHICLE RESEARCH	23,000	
GENERATION 0:		
Gen 0 Op Tests	4,500	
Gen 0 Field Test Evaluations	1,000	
GENERATION 1:		
RECAS Field Test	4,250	Light Vehicle
Rear-end CAS	1,400	Light Vehicle
LC/M CAS	600	Light Vehicle
Road Departure	2,100	Light Vehicle
Safety Impacting (Incl $35k f/TFHRC workload tool)	335	Light Vehicle
EBS	250	
Drowsy Driver Field Test	1,000	
Enabling Research Consortium:		
Forward Collision Warning	500	Light Vehicle
Workload Metrics	600	Light Vehicle
EDMap	1,500	Light Vehicle
Transit Rear-End	550	
Multiple Systems Integration Study [1]	940	Light Vehicle
FHWA Human Factors Research:		
In-Vehicle Information Systems Behavioral Model	65	Light Vehicle
Eff of Multi Turn Preview on Route Following Perf	5	Light Vehicle
Comp of Aud & Visual Icons f/Sign Recognition	5	Light Vehicle
Societal and Institutional Issues	100	Light Vehicle
Develop Cost/Benefit Methodology	250	Light Vehicle
Generation 2:		
Intersection [4]	1,200	Light Vehicle
Sensor Friendly Roadway	300	Light Vehicle
Define Short Range Communication Needs	100	Light Vehicle
Define Vehicle to Vehicle Communication Needs	100	Light Vehicle
Support:		
Showcase	400	Light Vehicle
TRB Review	200	Light Vehicle
NHTSA Support	400	Light Vehicle
Transit Support	100	
HF Support	155	Light Vehicle
ITS America	95	Light Vehicle

COMMERCIAL VEHICLE-RELATED TECHNOLOGIES

Question. How much of the IVI program during fiscal year 1998, fiscal year 1999 and fiscal year 2000 was devoted to commercial vehicle-related technologies? How were those funds used?

Answer. During fiscal year 1998, $1,824,000 was spent on commercial vehicle elements of the IVI program. The Commercial Vehicle element of the IVI program conducts research, analysis, information sharing, field tests and evaluations aimed at developing selected deployable commercial vehicle IVI technologies. The IVI Commercial Vehicle technologies apply to trucks and non-transit buses and are intended to improve safety and operational efficiency. Specifically, we invested $649,000 in the vehicle stability and $790,000 in the driver condition warning IVI Commercial Vehicle problems areas. In addition, we invested $385,000 in electronic braking systems (EBS) performance testing. EBS is an enabling technology for many of the IVI Commercial Vehicle Services.

During fiscal year 1999, $5,250,000 was spent on commercial vehicle elements of the IVI program. The Commercial Vehicle element of the IVI program conducts research, analysis, information sharing, field tests and evaluations aimed at developing selected deployable commercial vehicle IVI technologies. The IVI Commercial

Vehicle technologies apply to trucks and non-transit buses and are intended to improve safety and operational efficiency. Specifically, we invested $1,100,000 in the vehicle stability and $1,500,000 in the driver condition warning IVI Commercial Vehicle problems areas. In addition, we invested $150,000 in EBS performance testing. Three Generation 0 Operational Tests were awarded for Commercial Vehicle Projects and $4,500,000 was obligated to these projects in fiscal year 1999. The objective of these tests is to measure the effectiveness of systems which will be deployed by 2003. Freightliner will test a rollover stability advisor system. Mack Trucks will test an infrastructure assisted hazard warning system. Volvo will test a rear-end collision warning system and an advanced brake system.

In fiscal year 2000, $5,750,000 was spent on commercial vehicle projects. We invested $4,500,000 to continue the Generation 0 Operational Tests and Evaluation projects. We invested $250,000 to initiate development of objective test procedures for advanced braking systems. Fiscal year 2000 will be our final year of preparation for a Drowsy Driver Field Test. We invested $1 million to complete a driver vehicle interface and perform a final validation of the PERCLOS system.

Question. How much of the IVI program during fiscal year 2001 will be devoted to technologies to improve commercial vehicle safety? How will those funds be used?

Answer. In fiscal year 2001, $8.2 million of the IVI program funding will be devoted to technologies to improve commercial vehicle safety. The commercial vehicle platform will be the early deployer of these technologies but as system performance improves, costs decrease and benefits are demonstrated, these safety systems will become available on the light vehicle platform. Our evaluation of these projects will include the "transferability" to light vehicles. The fiscal year 2001 funds will be used as follows:

Generation 0 Operational Tests and Evaluation.—$3,500,000. This will be the final year of funding for the four Generation 0 operational tests which were awarded during fiscal year 1999. Data collection will be conducted in fiscal year 2001 and into fiscal year 2002. All work should be completed in fiscal year 2002 using previous funding. This project is focused on driver-assistance products that will be commercially available within the next five years. We do not expect that these systems will meet the full performance required to address the individual problem areas, as described in our preliminary performance specifications. It is important to determine if these systems will have an impact on safety and performance, whether it is positive or negative. Of equal importance to safety is the impact of multiple systems on the driver's performance. The subject of the operational tests follows:

A collision warning system (advanced Eaton-Vorad) including closing distance warning, blind spot object warning, and adaptive cruise control will be evaluated on 50 heavy vehicles and an additional 50 vehicles will be used as a control group. The 100 test vehicles will operate in commercial service on public roads through the U.S.

Infrastructure-assisted road hazard warning will be evaluated on 143 commercial vehicle tractors. The test vehicles will operate in commercial service on public roads throughout the Commonwealth of Virginia.

A truck "Rollover Stability Advisor" (RSA) to warn truck drivers of potential instability will be evaluated. Six tractors coupled to tanker semi-trailers will operate in commercial service in the Midwest. Three of the tractors will be equipped with the countermeasure and three will serve as the unequipped control group. The test fleet will be dispatched and managed from LaPorte, IN, about 45 miles southeast of Chicago.

Generation 1—Vehicle Stability Operational Test—$1,000,000.—This field test will build on technologies developed under the IVI commercial vehicle platform in fiscal year 1999 and fiscal year 2000 to test on commercial vehicle operators in real world, revenue producing operations the effectiveness of electronic braking systems (EBS). This will also test the enhanced safety benefits of using EBS as these systems have the potential to: reduce brake response and release times; decrease stopping distance; improve anti-lock braking performance; provide the capability for stability corrections by selective braking; optimize braking strategies for brake pressure distribution, optimize brake lining wear; enhance braking compatibility between tractors and trailers; and foster development of collision avoidance systems for commercial vehicles. It is expected that commercial vehicle manufacturers and commercial vehicle fleets will cooperatively work with the Department in field testing these devices. In addition, this work may be done in separate tests in order to assess EBS performance on double and triple trailer combination trucks. These systems potentially offer many advantages, compared to pneumatically-controlled systems, in terms of safety, efficiency, productivity and reliability, including: reduced brake response and release times, decreased stopping distance, and an optimized strategy for brake pressure distribution and adhesion utilization.

Generation 1—Drowsy Driver Operational Test—$2,000,000.—This operational test will be the second year of a three year operational test of drowsy driver technology developed under the IVI commercial vehicle platform in previous years. This technology detects and warns of drowsiness of drivers of commercial vehicles in real world, revenue producing operations. This Operational Test will evaluate the use of such a system in preventing crashes involving fatigued commercial vehicle drivers. It is expected that commercial vehicle manufacturers and commercial vehicle fleets will be working cooperatively work with the Department in field testing of these devices.

Generation 1—Vehicle Stability Field Test—$1,000,000.—This field test will build on technologies developed under the IVI commercial vehicle platform in fiscal year 1999 and fiscal year 2000 to test on commercial vehicle operators in real world, revenue producing operations the effectiveness of electronic braking systems (EBS). This will also test the enhanced safety benefits of using EBS as these systems have the potential to: reduce brake response and release times; decrease stopping distance; improve anti-lock braking performance; provide the capability for stability corrections by selective braking; optimize braking strategies for brake pressure distribution, optimize brake lining wear; enhance braking compatibility between tractors and trailers; and foster development of collision avoidance systems for commercial vehicles. It is expected that commercial vehicle manufacturers and commercial vehicle fleets will cooperatively work with the Department in field testing of these devices. In addition, this work may be done in separate tests in order to assess EBS performance on double and triple trailer combination trucks. These systems potentially offer many advantages, compared to pneumatically-controlled systems, in terms of safety, efficiency, productivity and reliability, including: reduced brake response and release times, decreased stopping distance, and an optimized strategy for brake pressure distribution and adhesion utilization.

Generation 2—Vehicle Stability Problem Area Research—$700,000.—This project will support advanced activities in this problem area that build on the capabilities addressed in the ongoing filed test. This is a core activity of the Commercial Vehicle Intelligent Vehicle program and will explore the most promising method of integrating the stability enhancement and vehicle diagnostic research to develop the fully integrated IVI Commercial Vehicle. The performance specifications developed for other platforms will be expanded to incorporate adverse weather, complex road geometry and night time driving conditions. It is expected that the role of infrastructure cooperative and vehicle to vehicle cooperative systems will be increased. Supporting research areas include in-vehicle naturalistic vehicle following studies, benefits methodology developments including NADS and traffic simulation methods. This activity will also include the development of tools that will be used to quantify the performance of concepts and specific systems to be integrated in any IVI Commercial Vehicle Operational Test of the developed technology.

IVI CHALLENGES

Question. Is the Department having any problems or facing any challenges in moving the IVI forward expeditiously? If so, please describe the scope and nature of those challenges and discuss how and whether the fiscal year 2001 budget will address those concerns.

Answer. The IVI seeks to expedite the commercial availability of advance vehicle control and safety systems that will reduce driver workload and improve decision making in complex traffic or hazardous situations. By its nature this is a difficult and complex problem to solve. From its inception, this program has been designed to address these challenges.

Developing solutions to the eight problem areas is a highly complex undertaking. It involves determining causality, developing performance specifications for potential countermeasures, measuring the technical performance and user acceptance of applicable systems, estimating and validating benefits. In order to provide near term benefits, the IVI will not wait to develop the optimal solution, but will evaluate and encourage the deployment of effective systems that may only partially address the problem areas. In order to implement this incremental approach, the IVI will focus on developing generations of vehicles with increasing capabilities which address the eight problem areas. During the period covered by TEA–21, U.S. DOT intends to support work on generations zero, one, and two. Each succeeding generation is expected to address systems with more advanced capabilities, higher levels of integration and increased infrastructure cooperation.

Fiscal year 2001 will be the final year of funding for the Generation 0 Operational Tests. These tests will demonstrate the effectiveness and benefits of systems which will be deployed by fiscal year 2003. We will continue our preparation for Genera-

tion 1 Field Tests. This will include development of objective test procedures, evaluation methodologies and driver vehicle interface requirements. Generation 2 research will focus on extending the benefits of IVI systems through cooperation with infrastructure and inter-vehicle communications. A central theme which runs through all of our research and operational testing is a concern for the effect IVI systems will have on driver distraction and behavior. To address these issues we are collecting naturalistic driving data, developing workload metrics, developing driver-vehicle interface guidelines and field testing IVI systems.

COLLISION AVOIDANCE SYSTEM

Question. In fiscal year 2001 does the Department intend to issue another solicitation inviting participation in operational tests to advance technologies tested in the passenger vehicle platform? What would be the scope and nature of that solicitation?

Answer. In fiscal year 2001, we intend to solicit participation in a field test of a Generation 1 road departure collision avoidance system for light vehicles (passenger vehicles). We intended to issue this solicitation in fiscal year 2000, but it was delayed in order to complete evaluation methodologies and objective test procedures. This will be a competitive solicitation open to teams led by an automotive manufacture or tier one supplier who will provide significant cost share. This project will equip and test a fleet of vehicles with a first-generation road departure collision avoidance system. This system may be vehicle based or have infrastructure cooperative elements. The evaluation will include a study of driver workload, driver acceptance, and behavioral adaptation. This will be a 3-year effort.

NAS PEER REVIEW PANEL

Question. What are the principal findings from the National Academy of Sciences peer review panel on the IVI?

Answer. The panel published its first letter report in June 1999. A second report is expected in June of this year. A summary of the committee's key findings and the DOT response from the June 1999 report follows:

1. "The main point of confusion was the scope of program activities, specifically whether highway as well as vehicle improvements are part of the IVI program mission. In their presentations to the committee, IVI program staff made clear the safety goal and vehicle-related, near-term focus of the program, but the committee believes the documentation would be more compelling if program goals were described more simply and clearly in future revisions of these materials."

The scope of the IVI covers vehicle-based systems. This includes autonomous countermeasures which are completely contained on the vehicle, and cooperative systems which have an on-board component that communicate with an infrastructure-based component. The 1997 Business Plan has been revised in part, to clarify the program goals.

2. "The committee is unanimous in its support of safety as the primary program goal. Moreover, it agrees that DOT has an appropriate and important role to play in facilitating the development of IV technologies, and evaluating their impact on safety as they appear on more and more vehicles."

We agreed with this statement and reiterated that the program goal as documented in the business plan is to increase safety on U.S. roads.

3. "The committee believes the safety goal of the IVI program would be better served if DOT were to acknowledge the limits of its role in accelerating the deployment of in-vehicle technologies, and place greater emphasis on accelerating enabling research, facilitating standards setting, and understanding the crash reduction potential and other safety effects of candidate IV technologies both in development and commercially available."

We believe we have acknowledged our limitations. The program mission states that we are "facilitating" the acceleration of deployment. We have engaged the true deployers of these systems and engaged them in cooperative research and testing. The activities that were recommended ("accelerating enabling research, facilitating standards setting, and understanding the crash reduction potential and other safety effects of candidate IV technologies both in development and commercially available") are already the core activities of the IVI program.

4. "Consideration should be given to allocating part of the program budget to human factors research on IV technologies that have already reached the marketplace."

The IVI program addresses technologies that have already been deployed in two ways. First, we have defined a problem area titled "Safety Impacting Services." This category addresses the system performance as well as human factors related impact

with regard to safety of in-vehicle ITS systems, such as in-vehicle computers, that are entering or already in the marketplace. Secondly, within each of the other problem areas, we evaluate the performance of these systems which are already on the market, on a case by case basis. For example we are conducting an operational test of the Eaton-VORAD Collision Warning System, and are conducting test track studies of in-vehicle computing systems. We published a compendium of our ongoing and planned human factors activities to document this.

5. "The program would also benefit from a more detailed discussion of how proposed human factors research will be integrated into each stage of technology development and assessment."

We provided a detailed presentation on this subject during the November 1999 committee meeting. A briefing paper on our human factors strategy and a copy of the compendium of our ongoing and planned human factors activities was included in the committee's pre-meeting reading materials and is available on our web site (http://www.its.dot.gov).

6. "At the broadest level, the committee believes the federal government's role in the IVI program should be to facilitate (rather than accelerate) the development and to monitor and evaluate the deployment of new motor vehicle technologies with the potential to make the driving task safer."

We agree with this statement and believe the activities described in the program documentation are intended to achieve facilitation.

7. "In the committee's judgment, the appropriate role for government in the IVI program should be more sharply defined than it is at present, so that the value added by government participation will be evident."

The IVI can only be effective at reducing motor vehicle crashes if the widespread deployment of vehicle-based and infrastructure cooperative safety enhancing products and systems is achieved. In order to achieve this vision, U.S. DOT has a two-part role. The first, is to ensure that safety is not comprised by the introduction of in-vehicle systems. A particular interest for the IVI is the safety impact of combining multiple systems, such as route guidance and navigation, adaptive cruise control, cellular telephones, and in-vehicle computers. We will investigate the impact that these systems may have on driver behavior by measuring any changes in the level of driver workload and distraction.

The second part of the Federal role in IVI, addresses our responsibility for reducing deaths, injuries and economic losses resulting from motor vehicle crashes. This role, which is a cornerstone of U.S. DOT's mission, will be carried out by facilitating the development, deployment and evaluation of driver-assistance safety products & systems. An analysis conducted by NHTSA showed that the widespread deployment of advanced driver assistance systems which address just three of the 8 IVI problem areas can reduce motor vehicle crashes by 17 percent annually. Based on this analysis, the IVI program was formed to more definitively evaluate the effectiveness of these technologies and depending on the results encourage their availability in the marketplace.

There are several factors which influence the definition of an effective role for U.S. DOT in this endeavor.

—IVI systems will be primarily developed by the private sector. U.S. DOT will work cooperatively with industry to define performance specifications for safety systems.

—IVI services will be deployed by the motor vehicle industry, fleet operators and local transportation agencies. U.S. DOT will support these stakeholders by providing information on the necessary technical performance, user acceptance and benefits of systems which address the IVI problem areas.

With these factors in mind, we have defined a role for U.S. DOT (as documented in the revised business plan) that will define the performance requirements for crash avoidance systems, evaluate their effectiveness and depending on results encourage their market availability. Some products which address the IVI problem areas with varying levels of effectiveness have and will continue to be made available even without a federally funded IVI program. But with the IVI program, we may expect better systems available sooner.

8. "In general, the government role in the IVI program should encompass activities (Enabling research, Research on technology integration, Research on unintended safety consequences of commercially available IV technologies), that industry or others are unlikely or unwilling to perform."

The IVI program does encompass these activities. This is documented in the program business plan.

9. "Government should help provide at least three types of data (Data and methodologies for benefit estimation, Baseline data on driver behavior, Data on crashes)."

The IVI program will help provide this data. This is documented in the program business plan.

10. "A key government role is to facilitate the necessary infrastructure investments for specific IV technologies that require cooperation between the vehicle and the highway (e.g., intersection collision avoidance systems)."

The scope of the IVI covers vehicle-based systems. This includes autonomous countermeasures which are completely contained on the vehicle, and cooperative systems which have an on-board component that communicate with an infrastructure-based component. We will assess the need for infrastructure cooperation within each of the problem areas. We have initiated a system study for the intersection and road departure collision problem areas. The results of these systems studies will define the path of future research. We have formed a consortium of State DOTs to address infrastructure issues. Additionally, we have several cross-cutting activities that address sensor friendly infrastructure and communication needs.

11. "The committee urges that this information be brought together in one place and clarified so that the federal role, and the resources that support it, is clearly identified for each program activity."

This has been done in the revised business plan.

12. "Given the reduced budget, narrower mission, and near-term objectives of the IVI program, the committee believes it is critical for the program to be well focused and for the roles of government and industry to be clearly defined."

This has been documented in the revised business plan. A briefing paper on this topic was provided to the committee and is available on our web site (http://www.its.dot.gov).

13. "DOT should set targets with respect to the crash reduction potential of particular technologies, and establish milestones for monitoring progress toward the deployment of those technologies and the realization of safety benefits."

A presentation on our strategy for benefits estimation was provided during the November meeting. We have initiated an activity to develop benefits estimates for the problem areas. This activity is difficult because of the nature of crash avoidance (long deployment cycles, difficult to measure) and the limited role of government (not a vehicle developer or deployer) but our work will lead to surrogate measures and protocols which will allow us to quantify benefits.

14. "The committee applauds DOT efforts to keep the IVI program focused. However, certain IV technologies also have important potential application for improved crashworthiness and injury mitigation once crashes have occurred. Some committee members urged that more provision be made in the program for these applications."

DOT recognizes and supports crash-worthiness efforts, however given the reductions in funding for IVI activities; it is a conscious decision by DOT to focus on crash avoidance.

15. "An important role for government is to facilitate the involvement of these new participants in appropriate partnership arrangements and other relevant program activities."

The mutual governance structure is intended to accomplish this. The non-traditional players will be brought in either to support the car, truck or infrastructure consortiums or the Federal Advisory Committee. A briefing paper was provided to the committee and is available on our web site (http://www.its.dot.gov).

16. "The committee urges that more of such material on problem identification and expected safety benefits be included in future revisions of IVI program documents."

The committee was provided with a briefing paper on this topic which is available on our web site (http://www.its.dot.gov).

NAS FINDINGS

Question. What actions has DOT taken to address these findings?

Answer. The panel published its first letter report in June 1999. A second report is expected in June of this year. A summary of the committee's key findings and the DOT response from the June 1999 report follows:

1. "The main point of confusion was the scope of program activities, specifically whether highway as well as vehicle improvements are part of the IVI program mission. In their presentations to the committee, IVI program staff made clear the safety goal and vehicle-related, near-term focus of the program, but the committee believes the documentation would be more compelling if program goals were described more simply and clearly in future revisions of these materials."

The scope of the IVI covers vehicle-based systems. This includes autonomous countermeasures which are completely contained on the vehicle, and cooperative systems which have an on-board component that communicate with an infrastruc-

ture-based component. The 1997 Business Plan has been revised in part, to clarify the program goals.

2. "The committee is unanimous in its support of safety as the primary program goal. Moreover, it agrees that DOT has an appropriate and important role to play in facilitating the development of IV technologies, and evaluating their impact on safety as they appear on more and more vehicles."

We agreed with this statement and reiterated that the program goal as documented in the business plan is to increase safety on U.S. roads.

3. "The committee believes the safety goal of the IVI program would be better served if DOT were to acknowledge the limits of its role in accelerating the deployment of in-vehicle technologies, and place greater emphasis on accelerating enabling research, facilitating standards setting, and understanding the crash reduction potential and other safety effects of candidate IV technologies both in development and commercially available."

We believe we have acknowledged our limitations. The program mission states that we are "facilitating" the acceleration of deployment. We have engaged the true deployers of these systems and engaged them in cooperative research and testing. The activities that were recommended ("accelerating enabling research, facilitating standards setting, and understanding the crash reduction potential and other safety effects of candidate IV technologies both in development and commercially available") are already the core activities of the IVI program.

4. "Consideration should be given to allocating part of the program budget to human factors research on IV technologies that have already reached the marketplace."

The IVI program addresses technologies that have already been deployed in two ways. First, we have defined a problem area titled "Safety Impacting Services." This category addresses the system performance as well as human factors related impact with regard to safety of in-vehicle ITS systems, such as in-vehicle computers, that are entering or already in the marketplace. Secondly, within each of the other problem areas, we evaluate the performance of these systems which are already on the market, on a case by case basis. For example we are conducting an operational test of the Eaton-VORAD Collision Warning System, and are conducting test track studies of in-vehicle computing systems. We published a compendium of our ongoing and planned human factors activities to document this.

5. "The program would also benefit from a more detailed discussion of how proposed human factors research will be integrated into each stage of technology development and assessment."

We provided a detailed presentation on this subject during the November 1999 committee meeting. A briefing paper on our human factors strategy and a copy of the compendium of our ongoing and planned human factors activities was included in the committee's pre-meeting reading materials and is available on our web site (http://www.its.dot.gov).

6. "At the broadest level, the committee believes the federal government's role in the IVI program should be to facilitate (rather than accelerate) the development and to monitor and evaluate the deployment of new motor vehicle technologies with the potential to make the driving task safer."

We agree with this statement and believe the activities described in the program documentation are intended to achieve facilitation.

7. "In the committee's judgment, the appropriate role for government in the IVI program should be more sharply defined than it is at present, so that the value added by government participation will be evident."

The IVI can only be effective at reducing motor vehicle crashes if the widespread deployment of vehicle-based and infrastructure cooperative safety enhancing products and systems is achieved. In order to achieve this vision, U.S. DOT has a two-part role. The first, is to ensure that safety is not comprised by the introduction of in-vehicle systems. A particular interest for the IVI is the safety impact of combining multiple systems, such as route guidance and navigation, adaptive cruise control, cellular telephones, and in-vehicle computers. We will investigate the impact that these systems may have on driver behavior by measuring any changes in the level of driver workload and distraction.

The second part of the Federal role in IVI, addresses our responsibility for reducing deaths, injuries and economic losses resulting from motor vehicle crashes. This role, which is a cornerstone of U.S. DOT's mission, will be carried out by facilitating the development, deployment and evaluation of driver-assistance safety products & systems. An analysis conducted by NHTSA showed that the widespread deployment of advanced driver assistance systems which address just three of the 8 IVI problem areas can reduce motor vehicle crashes by 17 percent annually. Based on this analysis, the IVI program was formed to more definitively evaluate the effectiveness of

these technologies and depending on the results encourage their availability in the marketplace.

There are several factors which influence the definition of an effective role for U.S. DOT in this endeavor.

—IVI systems will be primarily developed by the private sector. U.S. DOT will work cooperatively with industry to define performance specifications for safety systems.

—IVI services will be deployed by the motor vehicle industry, fleet operators and local transportation agencies. U.S. DOT will support these stakeholders by providing information on the necessary technical performance, user acceptance and benefits of systems which address the IVI problem areas.

With these factors in mind, we have defined a role for U.S. DOT (as documented in the revised business plan) that will define the performance requirements for crash avoidance systems, evaluate their effectiveness and depending on results encourage their market availability. Some products which address the IVI problem areas with varying levels of effectiveness have and will continue to be made available even without a federally funded IVI program. But with the IVI program, we may expect better systems available sooner.

8. "In general, the government role in the IVI program should encompass activities (Enabling research, Research on technology integration, Research on unintended safety consequences of commercially available IV technologies), that industry or others are unlikely or unwilling to perform."

The IVI program does encompass these activities. This is documented in the program business plan.

9. "Government should help provide at least three types of data (Data and methodologies for benefit estimation, Baseline data on driver behavior, Data on crashes)."

The IVI program will help provide this data. This is documented in the program business plan.

10. "A key government role is to facilitate the necessary infrastructure investments for specific IV technologies that require cooperation between the vehicle and the highway (e.g., intersection collision avoidance systems)."

The scope of the IVI covers vehicle-based systems. This includes autonomous countermeasures which are completely contained on the vehicle, and cooperative systems which have an on-board component that communicate with an infrastructure-based component. We will assess the need for infrastructure cooperation within each of the problem areas. We have initiated a system study for the intersection and road departure collision problem areas. The results of these systems studies will define the path of future research. We have formed a consortium of State DOTs to address infrastructure issues. Additionally, we have several cross-cutting activities that address sensor friendly infrastructure and communication needs.

11. "The committee urges that this information be brought together in one place and clarified so that the federal role, and the resources that support it, is clearly identified for each program activity."

This has been done in the revised business plan.

12. "Given the reduced budget, narrower mission, and near-term objectives of the IVI program, the committee believes it is critical for the program to be well focused and for the roles of government and industry to be clearly defined."

This has been documented in the revised business plan. A briefing paper on this topic was provided to the committee and is available on our web site (http://www.its.dot.gov).

13. "DOT should set targets with respect to the crash reduction potential of particular technologies, and establish milestones for monitoring progress toward the deployment of those technologies and the realization of safety benefits."

A presentation on our strategy for benefits estimation was provided during the November meeting. We have initiated an activity to develop benefits estimates for the problem areas. This activity is difficult because of the nature of crash avoidance (long deployment cycles, difficult to measure) and the limited role of government (not a vehicle developer or deployer) but our work will lead to surrogate measures and protocols which will allow us to quantify benefits.

14. "The committee applauds DOT efforts to keep the IVI program focused. However, certain IV technologies also have important potential application for improved crashworthiness and injury mitigation once crashes have occurred. Some committee members urged that more provision be made in the program for these applications."

DOT recognizes and supports crash-worthiness efforts, however given the reductions in funding for IVI activities; it is a conscious decision by DOT to focus on crash avoidance.

15. "An important role for government is to facilitate the involvement of these new participants in appropriate partnership arrangements and other relevant program activities"

The mutual governance structure is intended to accomplish this. The non-traditional players will be brought in either to support the car, truck or infrastructure consortiums or the Federal Advisory Committee. A briefing paper was provided to the committee and is available on our web site (http://www.its.dot.gov).

16. "The committee urges that more of such material on problem identification and expected safety benefits be included in future revisions of IVI program documents."

The committee was provided with a briefing paper on this topic which is available on our web site (http://www.its.dot.gov).

RESEARCH, DEVELOPMENT, AND TECHNOLOGY TRANSFER (RD&T)

Question. In the fiscal year 2000 report, for surface transportation RD&T the conferees encouraged FHWA to provide funding for a list of specified projects. For each project listed, please detail how FHWA responded to the request for support, being certain to identify the amount of funding that will be provided for each project.

Answer.

EARMARK	TEA–21		Conference		Total
	STR [1] (less OL)	TDIPP [1] (less OL)	TDIPP (50 percent)	STR (50 percent)	
Infrastructure	$20,251	$17,420	$500	$4,425	$42,596
Seismic Research (UCSD)	871				
Seismic Res. Prog. (U. of Buffalo)	1,742				
Fundamental Prop. of Asphalts (WRI)	2,613				
Recycled Materials Res. Center (UNH)	1,307				
Asphalt Research (Auburn U.)	218				
Long-Term Pavement Performance	8,710				
Concrete Pavement	4,355				
Corrosion Control and Prevention	435				
Geothermal Heat Pump (OK State U)		871			
Intell. Bridge Stiffener (U of OK)		871			
Innovative Bridge Research & Constr. Program		15,678			
Geosynthetic Mat'l.—Pavements (Montana St.)				200	
Polymer Additives—Asphalt Pavements				750	
Silica Fume HPC				500	
Polymer Binder (SC State/Clemson)				625	
Seismic Retro/NDE (Utah DOT)				750	
Adv. Eng./Wood Compos. (SD State/U of ME)				600	
Center for Excellence (WVU)—Structures/Pvmts				1,000	
ASR/LIthium—TDIPP			500		
Planning and Environment	975	5,575		2,475	9,025
Global Climate Research (U of AL)	174				
STECRP Advisory Board [2]	261				
TCM Model [2]	261				
Ecosystem Study [2]	87				
Performance Indicators [2]	105				
Ferry Study [2]	87				
Adv. Vehicle Research (U of A @ Tuscaloosa)		349			
Transp. Economic & Land Use Sys. (NJIT)		871			
Low-Speed Urban MagLev (from Title III—FTA)		4,355			
Native Vegetation Center (UNI)				150	
Continuation of the PM–10 study				50	
Particulate Matter Study				500	
Nat. Transportation. Network Analysis Capability				1,250	
Nat. Environmental Research Center				25	
Red River Trade Corridor (carryover fr. fiscal year 1998)				500	
Operations		2,932	1,000		3,932
Intelligent Transp. Infrastructure (PA)		1,480			
Adv. Traffic Monitoring & Response (PA)		1,452			
Ctr. for Adv. Sim. Tech., Long Island, NY (TDIPP)			1,000		
Motor Carrier and Highway Safety		4,050		50	4,100
Adv. Trauma Care (U of A @ Birmingham)		653			
Center for Transp. Injury Res. (Calspan; NY)		1,742			
Head & Spinal Cord Injury Res. (LA St. & GWU)		435			

EARMARK	TEA–21		Conference		Total
	STR [1] (less OL)	TDIPP [1] (less OL)	TDIPP (50 percent)	STR (50 percent)	
Motor Vehicle Safety Warning Sys. (GA Tech)	.....	610	.....	.....	.....
Motor Carrier Adv. Sensor Control Sys	.....	610	.....	.....	.....
MUTCD Highway/Rail Crossing	.....	.....	.....	50	.....
Highway Watch Program—(MC)	.....	.....	.....	750	.....
Truck Driving Ctr Safety Init. (Crowder Col.)—(MC)	.....	.....	.....	500	.....
Truck Driver Alertness—(MC)	.....	.....	.....	1,000	.....
Federal Lands	.....	.....	.....	.....	.....
Agency-Wide (Policy)	436	.....	.....	.....	436
International Outreach	436	.....	.....	.....	.....
Total	21,662	29,977	1,500	6,950	60,089

[1] STR—Surface Transportation Research funds; TEA–21 Sec. 5001(a)(1). TDIPP—Technology Deployment Program funds; TEA–21 Sec. 5001(a)(2).
[2] Level of Funding Not Specified in TEA–21.
Note: Motor Carrier Earmarks Shown for Information Only—not computed in the table.

SUPPLEMENTAL TECHNOLOGY DEPLOYMENT

Question. Please delineate in detail how the $7.7 million proposed for supplemental technology deployment will be used. Please break out the proposed use of those funds.

Answer. FHWA proposes to distribute the $7.7 million Supplemental Technology Deployment funds for marketing and technology delivery programs proportionately among our strategic goals, based upon the percentages in our original fiscal year 2001 budget request. Funds will be provided to support activities in the Resource Centers, Division Offices and Headquarters that promote innovation. Among the technology deployment tools that will be supported are demonstration projects, test and evaluation programs and the development of training materials to introduce and implement new technology.

PRELIMINARY DISTRIBUTION

Goal	Fiscal year 2001 request	Percent of request	Portion of $7.7m
Mobility	$62,015	49	$3,773,000
Safety	18,950	15	1,155,000
Productivity	14,525	12	924,000
Environment	19,825	16	1,232,000
National Security	665	1	77,000
Tech.Del./Market	9,200	7	539,000
Total	125,180	100	7,700,000

PERFORMANCE MEASURES

Question. Please describe in extensive detail the scope, nature, and objectives of your request for $1.85 million for performance measures.

Answer. There are three key objectives in our request of $1.85 million for performance measures:

(1) Although some performance indicators were included in the FHWA strategic plan, and others have been developed and reported to FHWA management, considerable work remains. For example, there are a number of unquantified GPRA measures like travel time, freight productivity, life-cycle cost/return on investment, etc.

(2) A conceptual framework has yet to be put in place for measuring the effectiveness of FHWA R&T expenditures. This activity is integral to assessing how R&T programs contribute to successful achievement of the agency's strategic goals. If we receive the level of funding requested in fiscal year 2001, the strategic assessment framework for evaluating R&T contributions should be in place by fiscal year 2002 with goal owners developing and applying performance measures to assess the contribution of R&T activities to their strategic goals.

(3) In the highway field, Federal activities are generally only a part of achieving results. Much of the responsibility for implementation falls to the state and local

goals and private sector. As we implement GPRA responsibilities, we will continue to engage our partners, customers, and stakeholders in improving, refining and setting performance goals, targets and measures. The funds will be used to complete implementation, coordinate data collection and conduct an overall assessment of the approach.

Question. What is the empirical basis for this request? How much is FHWA spending on similar activities, including the improvement of its performance measures in fiscal year 2000?

Answer. In fiscal year 2000, FHWA is using a combination of our general operating expenses, R&T funds, in-house staff, partners, and consultants to assist us in developing performance measures, facilitating meetings, and conducting GPRA-related studies.

Question. Why does FHWA maintain that it is important that this proposal be funded now?

Answer. It is important that we fund this proposal now because FHWA wants to develop and mobilize a long-term strategy for improving the agency's ability to meet the GPRA responsibilities and to carry out our overall mission. The funds will be used to develop a number of the unquantified GPRA measures like travel time, freight productivity, life-cycle cost/return on investment, etc.

The difficulty of linking R&T to specific outcomes does not preclude the application of performance measures to FHWA R&T programs or the incorporation of R&T into the broader framework of the Strategic Plan. Likewise, it does not prevent meaningful consideration of the real or potential contribution of specific research to future accomplishments. The definition and attainment of performance measures for future years will benefit from well-designed and implemented research activities that increase the understanding of issues and challenges, provide the foundation for solutions, demonstrate benefits, and generally support the implementation of successful innovations.

If we receive the level of funding requested in fiscal year 2001, the strategic assessment framework for evaluating R&T contributions should be in place by fiscal year 2002 with goal owners developing and applying performance measures to assess the contribution of R&T activities to their strategic goals. In which case, the fiscal year 2002 funds would be used to complete implementation, coordinate data collection, and conduct an overall assessment of the approach. If the level of funding is reduced, fiscal year 2002 funds would be used to put performance measures in place.

Question. Could some of these activities be conducted as part of the surface transportation R&D analyzes performed by RSPA?

Answer. The U.S. DOT Research and Technology Coordinating Council for DOT-level R&T strategic planning activities (as directed by TEA–21 Sec. 5108) requires support from all modal administrations for this work. RSPA relies on input from FHWA and other modal administrations which is provided through the Council. As the lead DOT agency for this activity, RSPA advises us of system-level, policy research areas which would contribute to Departmental R&T objectives. RSPA's analysis of the surface transportation R&D does not get down to the individual program level. It is primarily responsible for supporting the overall departmental level of analysis and for balancing departmental priorities and policy.

TRANSPORTATION RESEARCH BOARD

Question. Could you now conduct some of these activities using the Transportation Research Board at much less expense?

Answer. The Research and Technology Coordination Council of the U.S. Department of Transportation (DOT) and the National Research Council (NRC), acting through the Transportation Research Board (TRB), convened the Committee for Review of the National Transportation Science and Technology to review and comment on DOT's Strategic Plan, Performance Plan, and Program Performance Report (required under GPRA) with regard to surface transportation research and technology development. The committee formulated two key recommendations: (1) R&T priorities and activities should be tied more explicitly to the Department's strategic and performance goals and their relationship to these goals should be articulated more clearly; and (2) the R&D Plan should include the funding budgeted for specific R&T activities and performance goals, since budgets are a tangible reflection of the real priorities of an agency. The committee also recommended that the Department adopt explicit criteria and methodologies for prioritizing R&T activities, and specific performance measures for analyzing results. We believe that the Transportation Research Board has already given us their recommendations and now it is up to FHWA to develop strategies for implementing those recommendations in a system-

atic way. To be most effective, performance measurement should be the responsibility of the agency responsible for goal delivery.

GPRA RESPONSIBILITIES

Question. How are you now performing your GPRA responsibilities and your strategic planning pertaining to the R&D program without these funds?

Answer. We are now carrying out our GPRA responsibilities and strategic planning pertaining to the R&D program with a combination of general operating expenses, R&T funds, in house staff, partners, and consultants. However, in order for goal owners to develop and apply performance measures to assess the contribution of R&T activities to their strategic goals, we should have in place a well-designed strategic assessment framework for evaluating R&T contributions.

TECHNOLOGY DEPLOYMENT

Question. In the fiscal year 2000 conference report, the conferees directed that FHWA respond by December 1, 1999, to each of the recommendations presented in the Transportation Research Board report on technology deployment. Was this response submitted to both the House and Senate Committees on Appropriations? If not, please explain why.

Answer. Yes, on March 9, 2000.

TECHNOLOGY TRANSFER AND EVALUATIONS

Question. In light of the TRB report, how will FHWA improve its mechanisms of technology transfer and evaluations. What changes will be made in response to this report?

Answer. FHWA held a senior leadership retreat in January to examine how the new organizational structure is working. The first recommendation, that an FHWA headquarters office be assigned responsibility for agency wide technology transfer management, was a key item on the agenda. Our leadership agreed that while the new organization was intended to create a closer connection with potential users of technology, it also spread technology transfer expertise across many offices, making a corporate view on technology transfer difficult to achieve.

The FHWA senior leadership agreed to give responsibility for agency wide coordination of technology transfer management to the Office of Research and Technology Services, within the Research, Development, and Technology Service Business Unit. That office will coordinate technology transfer activities across the CBU's, as well as coordinating the preparation of a management plan and strategy for the agency's technology transfer activities, recommended by the RTCC. The office will also serve as a repository for technology transfer management expertise, identifying and sharing information regarding what works in the long run, in terms of technology transfer methods, for research products and FHWA customers.

In order to ensure close coordination between the various offices, I have asked each CBU and RC to designate a lead position specifically responsible for technology transfer. We have also agreed to establish a staff level technology transfer coordinating committee which will consist of representatives of each of the CBU's and RC's. Chaired by the Office of Research and Technology Services, this committee will develop an agency-wide technology transfer strategy and identifying appropriate venues and mechanisms for technology transfer. The committee will meet monthly to share expertise and coordinate technology transfer activities.

Finally, with regard to the third recommendation, we agree with the RTCC that FHWA needs to develop strong partnerships with those who use and implement highway technologies, as well as the decision-makers who are responsible for funding related to innovation. A National R&T Partnership Initiative, is currently underway, facilitated and coordinated by TRB, to establish stronger working relationships with key partner and customer groups. The objectives of the National Partnership Initiative are to broaden the range of contacts between the FHWA and the user community, to help develop a national consensus on the need for highway R&T, to determine priorities for highway R&T, to establish a national R&T agenda, and to identify the appropriate roles of the Federal Government, state and local governments, universities and the private sector in implementing an R&T program. Five Working Groups have been established under the National Partnership Initiative covering the areas of safety, infrastructure renewal, policy analysis and system monitoring, operations and mobility, and planning and environment. Representatives of FHWA are active participants in these working groups, and we will be tracking the overall FHWA effort, to ensure that there is sufficient communication between the working groups and a cross-cutting look at the issues identified.

Question. How is this reflected in the fiscal year 2001 budget request?

Answer. Although we did not specifically identify this function as a line item the responsibility for this management function will be with RD&T. Funding for this will be redirected from the Agency wide activities supporting the R&T program.

SURFACE TRANSPORTATION ACCOUNT

Question. For the surface transportation account, please compare your actual expenditures for each RD&T budget category, including technology assessment and deployment, against the amounts appropriated for fiscal year 1998 and fiscal year 1999. Please explain any deviation of more than 10 percent and be certain to exclude any carryover funds.

Answer.

[Dollars in thousands]

Transportation research	Fiscal years—			
	1998 Enacted [1]	1999 Enacted [2]	2000 Enacted [3]	2001 Request [4]
Surface Transportation	$85,536	$85,651	$84,488	$98,000
Safety	6,861	11,068	12,368	13,900
Pavements	9,243	11,611	11,367	11,240
Structures	8,447	14,216	13,065	14,260
Environment	2,971	4,680	5,400	6,546
Policy	4,123	4,768	3,484	7,000
Planning & Right-of-Way	5,856	3,854	3,484	4,729
Motor Carrier	5,572	5,651	5,574	.....
Highway Operations	.....	662	653	5,580
Freight R&D	.....	.....	436	.....
Technical Assessment and Deployment	10,163	12,362	12,194	.....
R&T Technical Support	8,711	6,623	6,533	8,600
Long Term Pavement Performance	10,000	8,830	8,710	10,000
Advanced Research	.....	883	784	900
International Outreach	889	442	436	1,500
National Advanced Driver Simulator	11,806	.....	.....	.....
SHARP II/RSPA	894	.....	.....	.....
Federal Lands	.....	9	.....	700
Asset Management	.....	.....	.....	1,400
Supplemental Technology Deployment	.....	.....	.....	7,000
Agency-Wide Activities	.....	.....	.....	4,645
Technology Deployment Program	31,185	30,905	34,840	45,000
Training and Education	12,474	13,245	13,936	18,000
National Highway Institute	4,455	5,298	5,226	7,000
Local Technical Assistance Program	6,237	6,181	6,968	9,000
Eisenhower Fellowship Program	1,782	1,766	1,742	2,000
Bureau of Transportation Statistics	31,000	31,000	31,000	31,000
Intelligent Transportation Systems (ITS)	174,636	176,600	183,955	218,000
Research	40,429	33,554	.....	.....
Operation Test	6,580	15,011	.....	.....
Evaluation/Program Assessment	6,000	5,740	.....	.....
Architecture and Standards	10,662	15,894	.....	.....
Integration	10,837	5,298	.....	.....
Program Support	8,654	8,389	.....	.....
Deployment Incentives—Earmarks	1,483	.....	.....	.....
ITS Deployment	89,991	92,715	.....	.....
University Transportation Research	22,854	22,649	23,735	27,250
Grand Total	357,685	360,050	371,954	437,250

[1] The column reflect the actual allocation of funds based on 89.3 percent of total contract authority contain in TEA21.
[2] The column reflect the actual allocation of funds based on 88.3 percent of total contract authority contain in TEA21.
[3] The column reflect the actual allocation of funds based on 87.1 percent of total contract authority contain in TEA21.
[4] These columns reflect the amounts authorized in TEA21.

CARRYOVER FUNDS

Question. Please indicate the amount of carryover funds for each of the last three years by subaccount or research category.

Answer. The carryover funds for each of the last three fiscal years are shown below by subaccount or research categories.

[In thousands of dollars]

Program	Fiscal years—		
	1999	1998	1997
Surface Transportation Research:			
Safety	594	100	1,235
Pavements	1,873	1,408	.....
Structures	2,212	1,634	88
Environment	251	370	95
Real Estate Services	3	.....	.....
Policy	60	.....	30
Planning	172	.....	.....
Motor Carriers	454	858	2,327
Basic Research	441	72	72
Technology Assessment and Deployment	937	65	300
Long-Term Pavement Performance	16	11	.....
R&T Technical Support	1,419	345	.....
Local Technical Assistance Program	242	407	.....
National Highway Institute	718	130	669
Eisenhower Fellowship	335	116	1
Advanced Research	34	.....	.....
Highway Operations	41	.....	.....
Minority Business Enterprise	.....	.....	14
International Transportation	101	191	168
Russia Technical Assistance	.....	.....	2
Federal Lands Contamination Clean-up	.....	1,774	1,774
ITS Research and Development	38,129	3,773	351

TRANSPORTATION RESEARCH BOARD ASSISTANCE

Question. For each of the last three years, how much did FHWA allocate to TRB for coordination and technical assistance to the RD&T program? Exactly what did TRB provide FHWA?

Answer. Over the last 3 years, FHWA has allocated to Transportation Research Board (TRB) for coordination and technical assistance to the RD&T program $2,665,740 in fiscal year 1998, $2,738,650 in fiscal year 1999, and $2,032,000 in fiscal year 2000.

TRB possesses a unique capability for the coordination and dissemination of research and technology (R&T) results as well as the promotion, review, and critique of the national program and has been of significant assistance to FHWA. TRB provides a source of national and international expertise to focus on critical national agenda items upon which the FHWA could draw in formulating and delivering its Research and Technology Program, and it provides a mechanism for considering the views of research bodies, highway users, suppliers, and contractors, along with economic, social, energy, and environmental concerns, as these issues related to highway transportation research and technology policy and programs. TRB also addresses issues related to the implementation of research results and the application of technology in the highway transportation field.

TRB brings its unique capabilities to performing a series of activities in support of the FHWA's R&T Program.

Conduct an Annual Meeting.—TRB conducts an annual national meeting in the Washington, D.C., area as a forum for the presentation of highway research results. In conjunction with the annual meeting, it provides FHWA with display areas and meeting facilities, arranges for providing miscellaneous items such as electrical hookups, easels, spot lighting, etc., and solicits, reviews, and selects appropriate papers to be presented at the meeting. The annual meeting is held within the context

of an overall transportation research meeting involving various modes of transportation. As part of and in conjunction with the annual meeting, TRB provides facilities and support for the various technical committees established by the TRB. TRB also provides for registration of all FHWA employees requesting registration (approximately 600) at the annual meeting at a lump sum amount.

Technical Committees.—TRB maintains standing committees of authorities in subject areas of interest to the FHWA. These committees are responsible for promoting the exchange of technical research information, for advancing the state of the art in the areas of their expertise, and for identifying research needs. It also establishes appropriate new committees as the need is demonstrated to respond to changing issues facing the transportation industry and conducts committee-sponsored conferences and workshops as determined appropriate by the technical committees.

Maintenance of National Overview of Highway Research.—TRB maintains a national overview of highway research. It visits approximately 17 State highway agencies per year and 50 State highway agencies over a 3-year period to assess the interest, competency, and relevancy of the research conducted by each State highway agency as well as encouraging a coordinated national transportation emphasis. In conjunction with these visits, TRB visits selected key universities and public/private researchers responsible for highway-related research.

Maintenance and Dissemination of Research Results.—TRB processes publications into the Transportation Research Information Service (TRIS) (estimated at approximately 30,000 publications per year). In addition, it provides TRIS searches for FHWA and it provides FHWA a statistical summary of requests of TRIS which originate from State DOTs on a semi-annual basis. TRB has also partnered with the Bureau of Transportation Statistics, U.S. Department of Transportation, to develop and make available web access to TRIS as a means of increasing accessibility to TRIS for users.

Publication and Distribution of Reports.—TRB develops, publishes, and distributes a variety of reports and periodicals to assist in the transfer of technical information. Publications include, among other areas, general non-technical reports related to very specific topics. Reports have also been developed to summarize and highlight some of the key papers presented at the annual meeting. TRB also prepares and annually updates a mailing list for distribution of all publications. The annual update shall be coordinated through the AOTR.

Research and Technology Review, Coordination, and Communications Program.—TRB conducts and documents a program to maintain a national, federally-funded research and development coordination and communications program. The program examines national highway research needs and focuses on global transportation issues that

—Provides FHWA technical information about other ongoing research needs and activities relative to FHWA's Research and Technology Program.

—Ensures that the States, the private sector, all other highway research bodies, highway users, associated interest groups, and other highway research interests have input to the national agenda of research needs and programs.

—Supports the National R&T Partnership Initiative and facilitate the operations of the working groups established as part of the initiative.

—Ensures that economic, social, cultural, manufacturing, environmental, and technical voices are heard for planning and developing highway research programs.

—Ensures that products evolving from the highway research process are directed towards market development and application, both in national and international arenas.

—Reduces redundancy and fragmentation, fosters innovation and focuses resources in all major highway research programs.

—Positions the United States' highway research programs for preeminent world leadership in technical expertise and knowledge.

—Encourages improved government, public-private, and international harmonization in other highway-related fields and in multi-modal transportation research.

—Enhances interest, awareness, and opportunities for highway research careers with all participating agencies.

—Increases opportunities for participation in FHWA programs by public agencies and private sector constituents.

To accomplish these objectives, the TRB will use the services of a Research and Technology Coordinating Committee (RTCC) established under its auspices. The RTCC is composed of 15 to 20 members, selected from among researchers, administrators, users, and practitioners from the public, private, and academic sectors. Specifically it will provide technical information in the following areas:

—Identify gaps in research which FHWA can use in formulating and delivering its Research and Technology Program.
—Monitor and support the National R&T Partnership Initiative, especially by contributing to the activities of the working groups formed to advance this initiative, synthesizing the output of the working groups and distributing appropriately, and providing a mechanism for the groups to issue formal consensus-based advice.
—Use national and international technical expertise to focus on critical national highway research agenda items.
—Identify areas of duplication of effort.
—Provide a mechanism for gathering research needs from research bodies, highway users, suppliers, and contractors, along with identifying economic, social energy and environmental concerns as they relate to highway research needs.
—Consider ways and means to increase State, local, and private sector participation in highway research and innovation.
—Address issues related to the implementation of research results and the application of technology in the highway field.

Through the agreement, TRB provides adequate staffing, travel, and facilities support to meet its responsibilities including committee support functions.

A second group, the Surface Transportation Environmental Cooperative Research Program Advisory Board (STECREP), was established by TRB on behalf of FHWA. STECREP was established as a result of congressional direction in TEA–21 to create an advisory board to recommend environmental and energy conservation research, technology development, and technology transfer activities related to surface transportation. The board includes 17 members representing perspectives from various levels of government administration, environmental groups, private industry, and university research centers. STECREP is responsible for:

—Recommending a national agenda of environmental and planning research priorities and technology transfer strategies to be conducted by the Transportation community.
—Supporting outreach and collaborations on research by:
  —Identifying and recommending opportunities for partnerships and collaboration on outreach, research and development, and technology transfer and dissemination, both among USDOT offices and with other federal agencies, research organizations, and partners.
  —Identifying and recommending potential opportunities for pool-funded research and opportunities to leverage research findings.
  —Supporting the coordination of environmental and planning research conducted through programs such as NCHRP, TCRP, and university research centers with that conducted through USDOT offices.
  —Supporting the increased visibility of research programs on transportation and environment.
  —Supporting research evaluation by directly participating in the design of research program evaluation, products, and technology dissemination activities, including the assessment of customer satisfaction.

STECRP also serves as one of the working groups in the National R&T Partnership Initiative for topics in areas relevant to its environment and planning charter.

Conduct an Innovations Deserving Exploratory Analysis (IDEA) Program.—TRB conducts an annual Innovations Deserving Exploratory Analysis (IDEA) Program, stressing innovation, product oriented proposals, with the potential to produce significant technological improvements in the highway community. The program is administered as part of the NCHRP.

Individuals and members of institutions, universities, small and large businesses, consulting firms and research laboratories in the United States and abroad and anyone working in the broad science and engineering areas that are associated with, or have relevance to, highway technology are eligible for the program.

All proposals are evaluated on a competitive basis. The proposals meeting the technical eligibility criteria are evaluated by an Expert Task Group consisting of technical experts from the various science and engineering disciplines. The awards under this program are fixed price contracts in the range of $10,000 to $100,000 and with contract durations ranging from a few weeks to a year.

As of fiscal year 1999, FHWA no longer contributes funds to the IDEA Program. Even during FHWA's funding participation, the TRB obtained additional funding from other sources, primarily the AASHTO member States. Participating researchers in the projects are expected to provide matching funds to those provided through the program.

Special Studies, Reviews, and Conferences.—In addition to the core services TRB provides to the FHWA for the funds noted, TRB also conducts special studies, pro-

gram reviews, and conferences when requested by FHWA. Each request is funded individually outside of the funding for the core services.

Question. How much will be allocated for this assistance in fiscal year 2001?

Answer. In fiscal year 2001, $2,800,000 will be allocated for TRB for coordination and technical assistance to the RD&T program.

ADVANCED RESEARCH PROGRAM

Question. Please discuss the scope and nature of your fiscal year 2000 advanced research program and indicate the amount and purpose of each relevant contract funded under that sub-account.

Answer: $100,000—This safety portion of the fiscal year 2000 Advanced Research funding sponsored a feasibility study aimed at increasing the magnitude of improvements in impact performance of roadside safety structures. The work is looking at the present safety design process in reverse. Specifically, starting with a pre-selected amount of safety improvement, the study will determine if present-day computer power can be used to guide a designer to a structural configuration that provides the selected level of improvement. Most of the literature on this method (Inverse Analysis) focuses on linear systems. There is a small research community trying to apply this method to non-linear events. Vehicle/safety structure impacts are very non-linear and this effort will establish feasibility for the use of Inverse Analysis on this subject area. If successful, follow-on funding will develop a production tool for use by practicing safety designers. The goal is to more rapidly increase the level of potential crash safeness residing within the roadside structures along the Nation's highways.

$100,000—This safety portion of the fiscal year 2000 Advanced Research funding sponsored development of an Automated Sign Recognition System (ASRS) using previously developed Equation Shell Software (EQS) which was delivered to the State of Connecticut in fiscal year 2000. This effort produced ASRS software capable of recognizing a finite set of individual traffic stop signs from the State's photolog database of highway video images. The ASRS software will replace manual detection of stop signs in the State's photolog database resulting in an inventory maintenance cost saving. The ASRS software was interfaced with the State's database and selected training sets for pattern recognition have been provided. The ASRS software is presently being develop with the State's most recent photolog data. $100,000—This safety portion of the fiscal year 2000 Advanced Research funding is sponsoring development of a Software Reliability Handbook. Public safety depends on the correctness of the output of highway related software in areas such as bridge and highway design, bridge monitoring, collision avoidance and traffic management. Errors can result either from bugs in the software, using the software incorrectly, or using it outside its intended application area. This handbook will provide techniques to lower the frequency of errors produced by software in highway engineering.

Software called SpecChek was developed to test the correctness of software and is being applied to the Interactive Highway Safety Design Module (ISHDM) software. Tests of the ISHDM software are underway.

For the Infrastructure part of Advanced Research, the scope has been considerably reduced since the passage of TEA 21 and the resulting budget cuts. The program had to be severely reduced in fiscal year 1999 and now is focused on maintaining essential research capabilities at Turner Fairbank Highway Research Center and associated activities at the Center for Neutron Research at the National Institute of Standard and Technology (NIST). This supports staff research in the areas of materials science of concrete and nondestructive materials characterization.

Specific staff research projects include: (1) application of nonlinear 3-dimensional finite element computer models and chaos theory analysis to structural health monitoring of bridges and (2) advanced materials characterization of fly ashes for improvement of concrete properties. These two projects are conducted by postdoctoral research associates through an interagency program administered by the National Research Council of the National Academy of Sciences under a contract with FHWA. Another area of staff research concerns the application of nuclear nondestructive methods to highway materials. This is being done through an in-house contractor, Wiss Janney and Elstner as part of the NDE Validation Center at TFHRC. A fourth staff project concerns the development of a detailed chemical kinetics model for the curing of Portland cement concrete. This involves the use of neutron scattering methods at the NIST Center for Neutron Research as well as the heavy ion beam accelerator at the University of the Ruhr in Bochum, Germany. Finally, a major in-house research program concerns the problem of concrete deterioration associated with delayed ettringite formation. This consists of experimental studies and chem-

ical model development performed in collaboration with the University of Maryland and Howard University. It should be noted that these collaborations are not funded by FHWA, but by NSF and DOE respectively.

In addition to contractor support for staff research, there are a few research grants to universities to continue projects started in prior years. Two of these involve advanced materials characterization methods for the delayed ettringite problem. One is with the University of California at Berkeley, cofunded with NSF, and uses neutron diffraction an synchrotron radiation to determine micro structure changes. The other, at the University of Hawaii, uses the scanning acoustic microscope and Raman spectroscopy to characterize ettringite mineralogy. The final grant to New Mexico State University, cofunded with the New Mexico DOT, concerns the installation of Bragg grating fiber optic sensors to monitor strain during construction and operation of the Rio Puerco Bridge near Albuquerque, culminating several years of research on this topic.

The allocation of fiscal year 2000 funds is summarized in Table 76.1 below. Please note that this does not include funds from collaborating organizations which have averaged roughly $1 million per year over the last 3 fiscal years.

TABLE 76.1.—*Allocation of Fiscal Year 2000 Infrastructure Advanced Research Budget*

[In thousands of dollars]

Title (Contractor)	*Fiscal year 2000*
Nuclear NDT Laboratory (Wiss Janney Elstner)	99
Application of Neutron Methods (NIST)	140
Postdoctoral Associates (National Academy of Sciences)	70
Concrete Deterioration Mechanisms (UC Berkeley/NSF)	50
Advanced Microscopy Methods for Concrete (U Hawaii)	45
Fiber Optics in Bridges (New Mexico State U.)	35
Small Purchases for Services, etc.	45
Total	484

TABLE 76.2.—EXTERNAL FUNDING FOR ADVANCED RESEARCH PROJECTS (FISCAL YEARS 1998–2000)

Project	Partner	Total funds	Partner share (percent)
Ettringite expansion test	University of Maryland	$150	100
Concrete deterioration	UC Berkeley/NSF	200	50
Neutron diffraction of ettringite	Missouri U.[2]/NSF	150	100
Calcium leaching in concrete Northwestern	U./NSF	150	100
Cement hydration kinetics [1]	W.R. Grace	100	100
Neutron chloride measurement [1]	W.R. Grace	150	100
Ledyard Bridge Fiber Optic System	Dartmouth College	10	30
Kealakaha Bridge Fiber Optic System	Hawaii DOT	200	100
Rio Puerco Bridge Fiber Optic System	New Mexico DOT	60	70
Woodrow Wilson Bridge Fiber Optic System [1]	Drexel University	75	100
Fiber Optic Weigh in Motion	State Pooled Fund	118	100
Electrochemical ASR Tests	State Pooled Fund	230	100
Aerial Robotics Bridge Inspection	State Pooled Fund	400	75
Microwave Fatigue Crack Detector	SBIR	600	100
Digital Acoustic Emissions System	State Pooled Fund	600	100
Total		3,193	

[1]Proposed.
[2]PI transferring to another university.

ADVANCED RESEARCH CONTRACTS

Question. Please discuss the scope and nature of your fiscal year 2001 advanced research program and indicate the amount and purpose of each relevant contract likely to be funded under that sub-account.

Answer. $100,000—This safety portion of Advanced Research funds will be applied to developing a final roadside safety design tool for practicing safety designers assuming feasibility is demonstrated in fiscal year 2000. (See fiscal year 2000, Inverse Analysis description.)

$100,000—This safety portion of Advanced Research funds will be applied to an on-going effort by the Advanced Research staff in the area of Data Mining and Multi-Dimensional Data Visualization. Past funding on this subject has been small and limited in scope. The objective is to make these general purpose powerful analysis methods more readily available to the researchers at the laboratory in the form of a free service. The goal is to accelerate the quantity and quality of insight that is extracted from a variety of data available at the laboratory. It is anticipated that the increase and improvement in "problem domain insight" will lead directly to increases in innovative solutions.

$50,000—This safety portion of Advanced Research funds will be applied to continue an on-going effort that utilizes a neural network as a basis for a drowsy driver warning system. Preliminary work on this topic has demonstrated feasibility, and, if no other source of funds are available, Advanced Research funds will be used to continue exploratory work on this topic. Although initial potential applications were envisioned for the large truck portion of the Nations vehicle fleet, the concepts explored in the feasibility phase indicate that it can also be considered for the total vehicle fleet.

$100,000—This safety portion of Advanced Research funds will be applied to extending the ASRS to recognize other types of signs and roadside safety hardware. The condition of roadside hardware will be addressed and application of the ASRS software to other State's databases. The EQS software will be applied to other highway applications such as traffic sensor and pavement applications.

$100,000—This safety portion of Advanced Research funds will be applied to improving techniques and software for testing highway software to improve reliability. The Software Reliability Handbook will be applied to highway software to test the techniques in the handbook.

With no increase in funds over fiscal year 2000, the Infrastructure part of Advanced Research would continue to be a maintenance level activity with scope and nature the same as described in the answer to the question above.

Increased funding in fiscal year 2001 would permit the accelerated progress in existing research activities. It would also allow the restarting of dormant research projects in the mechanisms of concrete deterioration. These include: (1) application of ice mechanics to freeze-thaw damage processes; (2) innovative methods for monitoring corrosion of reinforcing steel; (3) advanced analytical methods for determining alkali reactivity of aggregates; and (4) colloidal chemistry of delayed ettringite formation. Additional funds would permit new starts in: (1) application of nanotechnology to highway structures as part of the National Nanotechnology Initiative; (2) aging of steel in bridges; (3) optimization and standardization of fiber optic bridge monitoring systems; and (4) nonlinear dynamic 3-dimensional computer modeling of pavements.

EARMARKED PROJECTS

Question. For each of the earmarked projects or university activities specified in TEA–21 for fiscal year 2001 that pertain to RD&T, please specify the scope and nature of the RD&T to be conducted, and describe how those projects or activities will be integrated into a national research agenda.

Answer.

TEA–21 EARMARKED PROJECTS OR UNIVERSITY ACTIVITIES—SCOPE & NATURE OF R&T

Programs funded from Technology Deployment Initiatives and Partnerships Program [503]: Sec. 5001 (a)(2)

Organization.—University of Alabama at Tuscaloosa

Program Title.—Center for Advanced Vehicle Technologies

Funding.—Fiscal year 1998 ($0), fiscal year 1999 ($353,200), and fiscal year 1900 ($348,400)

Current Status.—The Center began operation in late 1998. The objective is to form a well-equipped interdisciplinary capability at the University to address a range of issues related to advanced vehicle development and operation.

Results.—During the first year of operation, progress was made to develop the administrative structure for the Center. Highlights include hiring of an administrative secretary and a key researcher to work in the Center. Equipment was purchased to improve the measurement of key engine properties including emissions. Five grants were awarded on various vehicle issues and a lecture series was introduced

which brings experts from other parts of the country to share insights. Finally, Dr. Bell made several presentations throughout the country to introduce the Center to others and to begin build partnerships.

Organization.—Oklahoma State University

Program Title.—Smart Bridge Research Project

Funding.—Fiscal year 1998 ($0), fiscal year 1999 ($883,000), and fiscal year 1900 ($871,000)

Current Status.—The researchers have submitted quarterly progress reports, indicating all proposed tasks are well underway.

Results.—A medium-scale deck section has been constructed. They are currently working to develop and validate advance modeling software. The research team is refining their deck heating system design. Continuous investigations are underway into systems to measure and analyze weather data, including sensor testing and development of integrated control strategies. Work has also begun on corrosion assessment, life-cycle economic analysis, and an operational web site for technology transfer.

Organization.—University of Oklahoma

Program Title.—Intelligent Stiffener for Bridge Stress Reduction

Funding.—Fiscal year 1998 ($0), fiscal year 1999 ($883,000), and fiscal year 1900 ($871,000)

Current Status.—Due to the recent death of the principal researcher, a proposal for this research grant has not been completed. A new researcher has been designated for the project, and a proposal is expected in the near future.

Results.—No results are available at this time.

Organization.—University of Alabama at Birmingham

Program Title.—Study of Advanced Trauma Care

Funding.—Fiscal year 1998 ($0), fiscal year 1999 ($662,250), and fiscal year 1900 ($653,250)

Current Status.—The Alabama Trauma Registry (ATR) has been established. Hospitals in the State that see a sizeable number of trauma patients each year were identified and contacted to obtain their support in collecting data using the American College of Surgeons (ACS) trauma registry database (TRACS). A protocol and time line has been developed to transfer the data to the ATR.

Results.—The transfer of data from the participating hospitals to the ATR is presently in the pilot phase. However, it is expected that all major trauma hospitals in the State will be providing trauma data to the ATR by July 2000. Data from this project and others will be used to make recommendations and establish protocol for the routine collection of data to provide better patient care.

Organization.—Calspan—University of Buffalo Research Center

Program Title.—Transportation Injury Research

Funding.—Fiscal year 1998 ($1,782,000), fiscal year 1999 ($1,766,000), and fiscal year 1900 ($1,742,000)

Current Status.—Grantees are in their second year of effort of interdisciplinary research on ways to reduce the occurrence, severity, and consequences of crash related injuries that now amount to nearly five million people each year in the U.S., including 42,000 deaths. CenTIR projects are underway to provide real-world demonstrations and evaluations of advanced technologies, systems and programs. These projects are advancing crash detection and notification technologies with crash injury assessment. The are also improving the process of providing emergency triage, transport, and treatment of crash injured people.

Results.—CenTIR research has advanced technical and governmental understanding of technological opportunities for, and institutional hurdles to, improving the safety of U.S. motorists. CenTIR research has helped define the safety potential for automatic crash notification technologies and the need for providing enhanced wireless 9–1–1 service nationwide. CenTIR research is being used at the Federal, State and local levels. At the Federal level, CenTIR communications on the safety potential of using wireless technologies to improve crash safety has been used in the NHTSA, FHWA, and JPO. In addition, CenTIR research has been a part of the deliberations of the NTSB, the FCC, and the Congress. On October 26, 1999, the President signed into law the Wireless Communications and Public Safety Act of 1999 that found "emerging technologies can be a critical component...to reduce emergency response times and provide appropriate care." Stated its purpose as "to encourage and facilitate the prompt deployment throughout the United States of a seamless, ubiquitous, and reliable end-to-end infrastructure . . . to meet the Nation's public safety and other communications needs." We expect that there will be continued use of the findings of CenTIR research to advance the public safety by DOT and other agencies at all levels of government.

Organization.—Louisiana State University and The George Washington University

Program Title.—Head and Spinal Cord Research

Funding.—Fiscal year 1998 ($0), fiscal year 1999 ($441,500), and fiscal year 1900 ($435,500)

Current Status.—Louisiana State University has commenced work in the following areas: (a) development and implementation of a motor vehicle crash victim data registry, (b) investigation of mechanisms of neurotrauma, and (c) exploration and evaluation of novel neuroprotective drugs.

The George Washington University has commenced work in collision avoidance research and crash analysis research. Under collision avoidance, the following tasks are underway: (a) literature review of collision avoidance methods and developments, (b) development of a driving simulator laboratory, and (c) review and comparison of specific adaptive or intelligent cruise control systems. In the category of crash analysis research, the following tasks are underway: (a) finite element modeling of vehicles, (b) development of a folded/vented airbag model, (c) mathematical simulation of crash test dummy certification procedures and comparison to equivalent laboratory data, and (d) airbag modeling code evaluation and validation.

Results.—Louisiana State University: (a) The motor vehicle crash data base now contains data on 400 victims with more than 2000 documented injuries. A Microsoft Access database is maintained on an Internet server, providing 24 hour update capability and access. (b) An improved percussion apparatus has been developed to support experimental head trauma experiments utilizing a rat model. (c) Preliminary studies have been conducted to identify up-regulation of the CO_X–2 gene in the brain preceding irreversible injury. (d) Experimental strategies for screening and evaluation of neuroprotective drugs have been devised.

George Washington University.—(a) Preliminary collision avoidance literature review is completed. (b) All components required to assemble the driver simulator are now available for assembly. (c) Portions of vehicle model development have been completed. (d) Air bag code evaluation has begun.

Organization.—Georgia Technical Research Institute

Program Title.—Motor Vehicle Safety Warning System

Funding.—Fiscal year 1998 ($623,700), fiscal year 1999 ($618,100), and fiscal year 1900 ($609,700)

Current Status.—The Georgia Technical Research Institute is conducting an evaluation of radio and microwave technology for a motor vehicle safety warning system. The three elements that comprise the safety warning system are a mobile transmitter, a fixed site transmitter for roadside deployment, and an in-vehicle receiver and display unit. The study is currently evaluating the viability of sending variable text messages to vehicles and assessing potential application including rail crossing safety systems.

Results.—Georgia Tech. has confirmed that the fixed site transmitter can be remotely programmed in real time via a modem. This will allow an operator of an advanced traffic management system to change the information as needed to provide timely safety warnings to drivers through the remote fixed site transmitter. Potential applications that take advantage of this function will now be evaluated.

Organization.—Booz-Allen & Hamilton

Program Title.—Motor Carrier Advanced Sensor Control System

Funding.—Fiscal year 1998 ($623,700), fiscal year 1999 ($618,100), and fiscal year 1900 ($609,700)

Current Status.—The initial task of the study is underway. It includes a literature review and related analyses of accident databases. A meeting with interested original equipment manufacturers (OEMs) and Commercial Motor Vehicle operators will be held in late February. The detailed project scope is under development. The Truck Manufacturers Association is working with the Federal Motor Carrier Safety Administration and the contractor to implement this program.

Results.—No information available at this time.

Organization.—Signal Corporation

Program Title.—Intelligent Transportation Infrastructure System

Funding.—Fiscal year 1998 ($1,514,700), fiscal year 1999 ($1,501,100), and fiscal year 1900 ($1,480,700)

Current Status.—Project design is well underway in Pittsburgh and will begin later this year in Philadelphia. System implementation is expected around July 2000 in Pittsburgh and November in Philadelphia.

Results.—No results are available at this time

Organization.—State of Pennsylvania

Program Title.—Advanced Traffic Monitoring and Emergency Response

Funding.—Fiscal year 1998 ($1,485,297), fiscal year 1999 ($1,471,961), and fiscal year 1900 ($1,451,957)

Current Status.—Little, if any work has been initiated on this project. A feasibility and needs' study is underway with completion expected in July 2000.

Results.—No results are available at this time.

Organization.—New Jersey Institute of Technology

Program Title.—Development of a Transportation Economic and Land Use System

Funding.—Fiscal year 1998 ($891,000), fiscal year 1999 ($883,000), and fiscal year 1900 ($871,000)

Current Status.—The TELUS project began in August of 1998. The objective is to support State governments and Metropolitan Planning Agencies by developing an automated data base to report on the status of projects. The TELUS suite of programs will also include modules to analyze economic and land use impacts of projects.

Results.—A Beta test group, composed of 15 MPOs, has been formed and is currently testing an early release of TELUS. The Beta test group has reported very good results and is anxious to receive the final version.

Organization.—Twenty State Departments of Transportation (discretionary)

Program Title.—Innovative Bridge Research and Construction Program—Construction Component

Funding.—Fiscal year 1998 ($8,910,000), fiscal year 1999 ($13,245,000), and fiscal year 1900 ($14,807,000)

Current Status.—Allocations of funds have been made to all 20 States participating in the program for fiscal year 1998 & fiscal year 1999. There are 60 different projects being conducted on varying schedules according to the individual States' construction programs. Some projects have already awarded for construction. One example is the replacement of deteriorated a concrete deck on the Salem Avenue Bridge over the Great Miami River Bridge in Dayton, Ohio. Most other projects are underway or will be awarded for construction in the Spring of 2000.

Results.—Results will vary according to the scope and complexity of the individual projects. At the Great Miami River Bridge in Dayton, Ohio, the deck replacement was completed successfully after solving several installation problems.

Organization.—Various outside organizations (discretionary)

Program Title.—Innovative Bridge Research & Construction Program—Research & Technology Component

Funding.—Fiscal year 1998 ($891,000), fiscal year 1999 ($13,245,000), and fiscal year 1900 ($14,807,000)

Current Status.—The Ohio DOT has completed the replacement of a deteriorated concrete deck on the Salem Avenue bridge over the Great Miami River. The new deck was constructed using modular sections of fiber-reinforced polymer (FRP) composite materials. The complete sequence of section fabrication and installation was videotaped in order to provide other potential users with the benefits of Ohio DOT's experience. The Precast Concrete Institute has scheduled the International Symposium on High Performance Concrete for Bridges for September 25–27, 2000, in Orlando, Florida.

The University of Nebraska—Lincoln is preparing to conduct the National Conference on High Performance Steel for Bridges in Baltimore, Maryland, November 29-December 1, 2000.

Results.—The results of the re-decking of the Salem Avenue bridge over the Great Miami River have been documented. This project was the first major project where a bridge was rehabilitated using a lightweight modular FRP deck which was prefabricated offsite and installed on the existing girders after the concrete deck was removed. The lessons learned and captured on video during this pioneer project will be disseminated to all bridge owning agencies in order to help with the further application of FRP as a bridge material.

Organization.—General Atomics Corporations

Program Title.—Advanced Technology Pilot Program (low speed magnetic levitation—Maglev)

Funding.—Fiscal year 1998 ($4,455,000), fiscal year 1999 ($4,415,000), and fiscal year 1900 ($4,355,000)

Current Status.—The FHWA is partnering with the FTA to carry out this project. To date, one project group has been selected. General Atomics Corporation (GA) will lead a team to develop Maglev technology for the purpose of providing a solution to urban and regional transportation problems. The GA team will develop low speed magnetic levitation technology in the following main task areas: (1) system studies, (2) base technology development (including technical risk identification and resolution), (3) route specific requirements, and (4) projection of overall system performance and a preliminary design for a full scale demonstration system concept. The

team comprises: GA, Macklin Engineering, Hall Industries, Booz Allen & Hamilton, Western Pennsylvania Maglev Development Corporation, Union Switch & Signal, Port Authority of Allegheny County, Sargent Electric Company, Mr. Richard Portis (DBE), P.J. Dick, Argonne National Laboratory, Carnegie Mellon University, Massachusetts Institute of Technology, and the Pennsylvania Department of Transportation.

Results.—The project was recently started and there are no measurable results at this time.

Organization.—Dowling College and Auburn University

Program Title.—Advanced Simulation Technologies

Funding.—Fiscal year 1998 ($0), fiscal year 1999 ($1,766,000), and fiscal year 1900 ($1,742,000)

Current Status.—The contracts for this have been recently awarded in early fiscal year 2000; little, if any work has been initiated on this project.

Results.—No results are available at this time.

Discretionary programs

In support of the Technology Deployment Initiatives and Partnership Program, numerous activities under several core areas, to include: Infrastructure, Safety, Planning and Environment, Federal Lands, and Operations have been initiated.

Highlight of Several Activities:

—In a joint effort with Kansas DOT, developed a Concrete Pavement Smoothness Implementation package, which included a video on smoothness construction and benefits.

—Prepared documentation on the role of the Highway Economic Requirement System Model in the statewide planning process.

—Updated the Pavement Management Systems Software catalog, and expanded it to include pavement condition data collection equipment.

—Instructed and deployed information to State DOT's on Heat Straightening Repairs of Steel Bridges.

—Designed a booklet "Building on the Past, Traveling to the Future," which is aimed at promoting the use of transportation enhancement funds for historic preservation projects and providing technical information.

—Produced a guidebook for the planning practioner.

—Developed a methodology for establishing an initial baseline for assessing the NEPA process.

—Supported International Scanning efforts in which several significant technologies were observed and documented to include: Bridge Scour Countermeasures, Steel Bridge Fabrication and Erection Technology, Methods and Procedures to Reduce Motorist Delay in Construction Zones, Recycled/Secondary Materials, Sustainable Transportation Development, and Durability of Concrete Segmental Bridges.

—Formulated the Manual on Uniform Traffic Control Devices, and reviewed the docket report.

—Converted the Federal Program manual to CD–ROM, and distributed to industry.

—Continued implementation of High Performance Concrete and Superpave into the Federal Lands program.

—Further development of the Rural ITS program.

—Coordinated development for Innovative Contracting activities.

—Developed a flow chart and mobility/safety recommendations and best practices report.

—Supported initiatives under the International Operations and Transportation Research Board and Performance Measures program.

—Supported the technology deployment initiatives of the Superpave and concrete pavement programs to State and local governments.

Funding.—Fiscal year 1998 ($10,008,603), fiscal year 1999 ($514,789), and fiscal year 1900 ($2,249,793)

Programs Funded from Surface Transportation Research Program [§ 502]: Sec. 5001(a)(1)

Seismic Research Program

$5.2 million has been awarded to date. The research is focusing on development of a Seismic Risk Analysis method which will be applicable to a major metropolitan area. To date, preliminary testing of the method has been tested using the Memphis, Tennessee area. A second focus area is the development of a seismic retrofitting manual for long span bridges. Finally, seismic specifications for standard

brides has been updated and will be submitted to AASHTO for their consideration in fiscal year 2000.

Asphalt Research

Section 5116(c) calls for $250,000 grants in each of fiscal year 1999 and 2000 to Auburn University for asphalt research. The National Center for Asphalt Technology (NCAT) at Auburn is currently constructing a pavement test track for evaluating the performance of 26 asphalt test sections during 2 years of heavy loading. The TEA–21 grants are being used for the construction of two polymer-modified asphalt sections (in the spring of 2000), to evaluate the rutting performance of a common commercial modifier and of chemically modified crumb rubber. The test track program is being funded by Alabama, 7 other States, the TEA–21 grants, and private sector partners. The complete 26-section experiment will yield comparative performance data on a number of asphalts and aggregates and further validate and improve the Superpave binder selection and mixture design systems.

Fundamental Properties of Asphalts and Modified Asphalts

Under Section 5117(b)(5), the Western Research Institute is continuing its study of fundamental properties of asphalts and modified asphalts. Several techniques and concepts were developed which have the potential to improve the Superpave binder specifications. A modulated differential scanning calorimetry (MDSC) method was developed as a reliable and rapid means of predicting low temperature asphalt properties. Researchers found the physical properties of thin (< 50 m) asphalt films—characteristic of asphalt mixtures and pavements—could not be predicted from the bulk physical properties of asphalts which are measured in the current Superpave binder specifications. The WRI team also found water, in the form of saturated humidity, has a major effect on the rheology of aged asphalts, and, further, found aging in a humid environment was not predictable from the results of currently used dry aging procedures. To validate these and other developments from the TEA–21 research, the WRI researchers worked with the Wyoming DOT to construct a well-controlled test pavement section in Albin, Wyoming; construction of test sections is planned at three other sites during the 2000 construction season.

Recycled Materials Resource Center

In 1999, the Recycled Materials Resource Center (RMRC) at the University of New Hampshire fully established its staff and advisory board. The RMRC initiated nine research projects covering a range of topics, including a study of the weathering and leaching behavior of by-product materials, development of specifications for recycled materials in transportation applications, and monitoring of construction projects using recycled materials. Most of these projects involve State DOTs and industry. Outreach activities included establishment of the center website and client database. In 1999, there were 7,000 visitors to the website and over 400 clients have registered with the center. The RMRC has also publicized and shared its work through participation in and sponsorship of regional and national/international conferences, and participated in a FHWA scanning tour to review European recycling practices and innovations, for which center personnel are preparing the final report.

Seismic Research

An initial $883,000 has been awarded to the University of California at San Diego (UCSD) for the development of a major national seismic shaking table which will be used to evaluate seismic design and response of retrofitted highway bridges. The study is jointly funded by the California Department of Transportation. The first series of testing will evaluate seismic isolation systems that will be retrofitted into major bridges in California.

Corrosion Control and Prevention

$883,000 has been awarded to CC Technologies and NACE for a two-year study to investigate the cost of corrosion and develop preventive strategies. To date, three reports have been published in the Materials Performance NACE International Journal. The study will update the cost of corrosion to the nation, estimated in 1975 to be 4.2 percent of GNP or $70 billion for 36 specific industry sectors.

Long-term Pavement Performance (LTPP)

Significant accomplishments for the LTPP program last year include the release of the DataPave 2.0 software. DataPave is a CD–ROM version of the LTPP database that provides the LTPP data in an easy to understand and useable format. DataPave 2.0 is a two CD–ROM set that includes triple the amount of data in DataPave 1.0. FHWA and the American Society of Civil Engineers sponsored a contest in the analysis of the LTPP data. The contest winner in 1999 presented a new

method of analyzing and understanding the profile of concrete pavements that has the potential to greatly improve the performance of future concrete pavements. Another product that was improved and released is LTPPBind 2.1. The improved LTPPBind has more information and significant improvements in functionality. This software enables highway agencies and industry in the selection of the most cost effective Superpave binders. Lastly, LTPP is cooperating with the National Cooperative Highway Research Program efforts in the development of the 2002 Pavement Design Guide. LTPP plays a critical role in the development of the new guide as the source of pavement data for the validation and calibration of the new Guide and in several instances as a source of information and procedures in the use of the new Guide.

Concrete Pavement

One of the significant products of the Concrete Pavement Program in the last year was the delivery of the HIPERPAV software and documentation. This user-friendly program allows engineers to predict and prevent early-age distress which may occur during the construction process. The result will be longer-lasting, better performing pavements. Also, procedures and equipment were developed for measuring the work ability of concrete prior to construction. This test will help avoid problems with placing and consolidating the concrete on the job.

EARMARKED PROJECTS OR UNIVERSITY ACTIVITIES

Question. For each of the earmarked projects or university activities specified in TEA–21 that pertain to RD&T, please specify the expected fiscal year 1999 and fiscal year 2000 budget amount and funding source.

Answer.

DESIGNATED PROGRAMS AND RECIPIENTS OF R&T FUNDS IN TEA 21 WITH TECHNICAL CORRECTIONS

Program Name	1998 [1]	1999 [2]	2000 [3 4]	2001	2002	2003	Total	Designated Recipient (if applicable)	TEA 21 Section
Programs Funded from Surface Transportation Research Program [§ 502]: Sec. 5001(a)(1):									
Seismic Research	.....	.883	.871	1.0	1.0	.....	3.754	University of California at San Diego	5116(a)(5–73)
Global Climate Research	.....	.177	.174	.2	.2	.2	0.951	University of Alabama in Huntsville	5116(b)(5–73)
Asphalt Research	.....	.221	.218	.....	.....	.....	0.439	Auburn University	5116(c)(5–74)
Fundamental Properties of Asphalts and Modified Asphalts	.891	2.649	2.613	3.0	3.0	3.0	15.153	Western Research Institute at the U of Wyoming.	5117(5)(5–81)
Recycled Materials Resource Center	1.337	1.325	1.307	1.5	1.5	1.5	8.469	U of New Hampshire	5117(8)(5–83)
Seismic Research Program	1.782	1.766	1.742	2.0	2.0	2.0	11.29	Natl Center for Earthquake Engineering Research at the U of Buffalo.	5001(c)(1)(B), 5102[502(f)](5–18)
Designated Recipient Total	4.01	7.021	6.925	7.7	7.7	6.7	40.056		
Corrosion Control & Prevention	.....	0.442	0.436	.....	.....	.....	0.878	.....	5117(b)(4)
International Outreach	.446	0.442	0.436	0.5	0.5	0.5	2.824	.....	5001(c)(1)(C), 5106 [506]
Long-Term Pavement Performance	8.910	8.830	8.71	10.0	10.0	10.0	56.45	.....	5102[502(d)]
Concrete Pavement	4.455	4.415	4.355	5.0	5.0	5.0	28.225	.....	5001(c)(1)(D)
Advanced Research	.....	.....	.....	.....	.....	.....	.....	.....	5102[502(d)]
Infrastructure Investment Needs Report	.....	.....	.....	.....	.....	.....	.....	.....	5102[502(g)]
Surface Transportation-Environment Cooperative Research Program.	.....	.....	.....	.....	.....	.....	.....	.....	5107[507]
Surface Transportation Research Strategic Planning	.....	.....	.....	.....	.....	.....	.....	.....	5108[508]
Future SHRP	.....	.....	.....	.....	.....	.....	.....	.....	5112
Transportation Management Plan for Olympics	.....	.....	.....	.....	.....	.....	.....	.....	1223(d)
Undesignated Recipient Total	13.811	14.129	13.937	15.5	15.5	15.5	88.377		
STRP Total	17.821	21.15	20.862	23.2	23.2	22.2	128.43		
Programs funded from Technology Deployment Initiatives and Partnerships Program [§ 503]: Sec. 5001(a)(2)									
Advanced Vehicle Research	.....	.353	.348	.4	.4	.4	1.901	University of Alabama at Tuscaloosa	5116(d)(5–74)
Geothermal Heat Pump Smart Bridge Program	.....	.883	.871	1.0	.5	.....	3.254	Oklahoma State University	5116(e)(5–74)
Intelligent Stiffener for Bridge Stress Reduction	.....	.883	.871	.5	.....	.....	2.254	U. of Oklahoma	5116(f)(5–75)
Study of Advanced Trauma Care	.....	.662	.653	.75	.75	.75	3.565	U. of Alabama at Birmingham	5116(g)(5–75)
Center for Transportation Injury Research	1.782	1.766	1.742	2.0	2.0	2.0	11.29	Calspan of Buffalo Research Center	5116(h)(5–76)

Head and Spinal Cord Injury Research	.....	.442	.436	.5	.5	.5	2.378	Louisiana State U. & Geo. Washington U.	5116(i)(5–76)
Motor Vehicle Safety Warning System	0.624	.618	.610	.7	.7	.7	3.952	Georgia State is understood to be recipient—not stated in bill.	5117(1)(5–77), 5117(b)(1)
Intelligent Transportation Infrastructure	1.515	1.501	1.481	1.7	1.7	1.7	9.597	State of Pennsylvania	5117(3)(5–78)
Advanced Traffic Monitoring and Response Center	1.485	1.472	1.452	1.667	1.667	1.667	9.41	Pennsylvania Transportation Institute at Letterkenny Army Depot.	5117(6)(5–82)
Transportation Economic and Land Use System	.891	.883	.871	1.0	1.0	1.0	5.645	New Jersey Institute of Technology	5117(7)(5–83)
Designated Recipient Total	6.297	9.463	9.335	10.217	9.217	8.717	53.246		
Transit/Magnetic Levitation	4.455	4.415	4.355	5.0	5.0	5.0	28.225		3015(c)(3–62)
Innovative Bridge RD&T	.891	.883	.871	1.0	1.0	1.0	5.645		5001(c)(2)(A), 503(b)(3)(A)(i)
Innovative Bridge Construction	8.910	13.245	14.807	20.0	20.0	20.0	96.962		5001(c)(2)(B,)503(b)(3)(A)(ii)
Motor Carrier Advanced Sensor Control System	0.624	0.618	0.610	0.7	0.7	0.7	3.952		5117(b)(2)
Driver Fatigue	.....	.....	.....	.....	.....	.....	.....		4021 (may use)
Undesignated Recipient Total	14.88	19.16	20.64	26.70	26.70	26.70	134.78		
TDIP Total	21.177	28.624	29.978	36.917	35.917	35.417	188.030		
Designated Research & Technology Programs Funded Separated from Title V:									
TRANSIMS	3.6	2.6	5.8	5.0	4.0	2.5	23.5		1210
Transportation & Community & Systems Preservation	.....	17.7	21.8	25.0	25.0	25.0	114.5		1221
School Transportation Safety	.....	.....	0.174	0.2	.....	.....	0.2	TRB	4030 "authorized to be appropriated"
Total	3.6	20.3	27.6	30.2	29.0	27.5	138.1		

[1] Obligation limitation applied for fiscal year 1998 was 89.1 percent.
[2] Obligation limitation applied for fiscal year 1999 was 88.3 percent.
[3] Obligation limitation applied for fiscal year 2000 was 87.1 percent.
[4] All amounts to be fully obligated by the end of fiscal year 2000.

Note: Section 1213, Studies and Reports, contains requirements for which funds may be sought from Section 5001 (a)(1). Two of these requirements also are given authority to appropriate additional funds. Section 2007 requires two safety studies for which funds may be sought from Section 5001(a)(1).

IG AUDIT OF TURNER-FAIRBANK HIGHWAY RESEARCH CENTER

Question. In the fiscal year 2000 conference report, the conferees directed that FHWA identify and submit specific corrections it plans to take in response to the Inspector General's audit of the Turner-Fairbank Highway Research Center contracting activities. That document was to be submitted to the House and Senate Committees on Appropriations by December 1, 1999. When will this requirement be implemented? What specific corrections are anticipated?

Answer. In response to the fiscal year 2000 conference report, the Action Plan developed in response to OIG Report No. MA–1999–095 was submitted to the House and Senate Committees on Appropriations on November 30, 1999, under cover of letter from the FHWA Administrator. The Action Plan, which was developed jointly by the FHWA Office of Acquisition Management and the FHWA Office of Research, Development and Technology, proposed a schedule of twenty-six specific corrective actions to take place over the course of the period from June 1, 1999, through September 30, 2000. Of these twenty-six actions, twenty-one have been completed to date. Actions completed include the revision and conduct of ethics training for hundreds of TFHRC and other FHWA personnel, training for Contracting Officer Technical Representatives (COTRs) in a number of areas, the issuance of agency guidelines on the use of interagency agreements, a restructuring of COTR delegation process, and a new reporting format for tracking progress under contracts. Key actions remaining for completion include: a comprehensive COTR guideline/manual on the FHWA StaffNet (the draft of this manual is completed and electronic publication is anticipated by the end of fiscal year 2000); an internal compliance review of the Office of Acquisition Management (scheduled for completion by September 30, 2000); and the development of agency policy on monitoring and control of Government property under contracts.

TECHNOLOGY ASSESSMENT AND DEPLOYMENT FUNDS

Question. Please prepare a table showing the Technology Assessment and Deployment funds derived from the surface transportation R&D account for fiscal year 2000 and proposed for fiscal year 2001. To the extent possible, please specify total amounts as well as amounts associated with each of the traditional categories of surface transportation R&D.

Answer. Fiscal year 2000 was the last year that Technology Assessment and Deployment (TAD) was included as a separate line item in FHWA's R&T budget request. With the closing of the Office of Technology Applications, R&T initiatives under the TAD line item have been shifted to the appropriate corporate business units (CBUs) and other parts of the agency in accordance with FHWA's strategic goals. This approach recognizes that development and delivery of technology is integral to advancing FHWA goals and objectives, and meeting the needs of our customers. The table below outline current program plans for funding "TAD-type" activities.

SAFETY RESEARCH

Question. Why are you proposing to reduce safety research funded out of the surface transportation R&D account?

Answer. Actually, we are not. The fiscal year 2000 Appropriations Conference Report indicated a total of $14.2 million for the safety line item. After the required obligation limitation reduction (12.9 percent for fiscal year 2000), $12.4 million was available for the traditional category of safety R&D. The fiscal year 2001 request is for $13.9 million for the traditional safety R&D category. The Administration's proposal includes a provision that the obligation limitation requirement be removed from the R&T funding categories. With approval of this provision the amount requested for fiscal year 2001 is an increase over the amount provided in fiscal year 2000. In addition, the Administration is proposing to increase TEA–21 authorization amounts for research and technology categories by a total of $50 million, and safety would receive an additional $5 million as part of this action. Approval of this request would improve our ability to advance critical safety R&T initiatives.

With about 40,000 highway fatalities per year, safety is certainly a high national priority. The fiscal year 2001 funds will be used for research and development for run-off-road (33 percent), pedestrian and bicycle (15 percent), human centered (12 percent), safety management (14 percent), speed management (20 percent), and work zones (6 percent).

EDUCATIONAL AND OUTREACH EFFORTS

Question. Please update your answer from last year regarding educational and outreach efforts to combat the problem of drivers running off the road. Please estimate fiscal year 2000 and fiscal year 2001 funds allocated or planned for this purpose and provide the funding source of these monies. What other relevant activities have been implemented?

Answer. The FHWA will have new starts and continue efforts started in fiscal year 2001 and prior to combat the problem of drivers running off the road. New starts include the development of training courses, demonstrations, and showcasing start-of-the-art technologies for practitioners. These include training courses/workshops for the highway practitioner in designing safer roadways e.g. Interactive Highway Safety Design Model, and Accommodating Older Drivers in Highway Design and Traffic Operations; the development and dissemination of technical guides and handbooks, e.g. Older Driver Highway Design Handbook, Highway Safety Design and Operations Guide; the showcasing and deployment of four Mobile Sign Retroreflectometer vans; and accelerating the deployment of roadside safety hardware to States and local communities.

Outreach efforts include a campaign on Run-Off-Road for safety practitioners and the highway public. This started in fiscal year 2000 and will be intensified in fiscal year 2001. The focus will be on three areas: keep the vehicle in lane, alert drivers when leaving their lane, and minimize the impact of the vehicle in the event of running off the road. Materials will be developed and disseminated focusing on these issues, e.g. rumble strips, share-the-road, specific user groups, techniques to improve roadside safety, skid resistant pavement, improved geometric designs, traffic control devices, better and improved methods for measuring the retroreflectivity of signs and markings.

Funding source.—Surface Transportation Research (STR)

Funds.—Fiscal year 2000—$375,000; fiscal year 2001—$750,000.

RUN-OFF-THE-ROAD ACTIVITIES

Question. On a project-by-project basis, please break down your request for $4.570 million regarding run-off-the-road activities.

Answer.

Project	*Request*
Policy Review Module for Multilane Rural Highways	$100,000
Interactive Highway Safety Design Model Training Course	200,000
Rural Multilane Crash Prediction Model	300,000
Safety Effectiveness of Roadway Improvements	200,000
Safety Effectiveness of Interchange Improvements	300,000
Beta Testing of IHSDM	150,000
IHSDM Driver Performance Module	330,000
Vehicle Performance for Operational Situations	100,000
Safety Evaluation Measures from TWOPAS	200,000
IHSDM Software Development	200,000
Geometric Design Laboratory	500,000
Safety Evaluation of Ultraviolet Headlamps	.....
Night Visibility Enhancement	210,000
Night Driving and Highway Lighting Requirements for the Older Driver	.....
Development of Fog and Ice Detection Systems (SBIR funded)	.....
Service Support for Photometric and Visibility Facility	70,000
Dynamic Testing of Posts in Soil	100,000
Safety Hardware Performance on Non-level Terrain	150,000
Vehicle Tripping and Rollover Mechanisms	300,000
Side-impact Relevance Study	200,000
Simulation Centers of Excellence	200,000
Cooperative Research, Maintenance & Operation of the FHWA/NHTSA NCAC	360,000
Cooperative Agreement with AAMA to Use Finite Element Analysis Instead of Crash Tests	100,000
Development of DYNA3D Analysis Tools for Roadside Hardware Applications	.....
Federal Outdoor Impact Laboratory	300,000
Roadside Safety Audits	150,000
Roadway Design Guide	100,000
Retroreflectivity	200,000

Project	*Request*
IHSDM Marketing	150,000
TOTAL	5,170,000

PEDESTRIAN AND BICYCLE SAFETY

Question. On a project-by-project basis, please break down your request for $2.150 million regarding pedestrian and bicycle safety.

Answer.

Project	*Request*
Automatic Pedestrian & Bicycle Counting Devices	$300,000
Accommodation of Non-Motorists in Restricted ROW	315,000
Intersection Hazard Index for Pedestrians (formerly titled: Effects of Intersection Design on Pedestrian & Bicyclist Safety)	275,000
Evaluation of Safety, Design, and Operation of Shared Use Paths (formerly titled: Design and Operations of Shared Use Paths)	230,000
Pedestrian Facilities Design Training Course (Funded by NHI)	
Pedestrian/Bicyclist Reference Set, Version 2	150,000
In-Service Trials/Technologies & Partnerships for Pedestrian/Highway Safety	450,000
Facilitator Training for "Pedestrian Safety Roadshow"	100,000
Pedestrian/Bicyclist Reference	
Pedestrian/Bicyclist Awareness	330,000
TOTAL	2,150,000

EFFECTIVENESS OF SAFETY RD&T PROGRAM

Question. How do you evaluate the effectiveness of your safety RD&T program? What measures of success are used? Please describe those results.

Answer. For products that are part of the Safety RD&T program, action plans that have input from the user community are developed. Part of the action plan includes what products have been developed and who the users are. Measures of success are: when the product is transferred from RD&T to CBUs and Field offices; delivery and deployment of new RD&T products included in CBU, Resource Center and Division Office Unit Plans; use of product by state DOT; and adoption of new product by state DOT.

Also, the effectiveness of the RD&T program is evaluated on many levels from determination of need to deployment and implementation at the state and local level. In the determination of need, workshops are held involving state and local personnel, FHWA field staff, and other partners (e.g. AASHTO, TRB, ITE, NSC, etc) to assess the safety need, research and/or focus area. During the program schedule additional workshops are held to provide guidance and ensure that the output of the activity meets the need and expectations of the user. The initial output of the activity can be an applied research product (e.g. Older Driver Highway Design Handbook), a process that improves highway design and safety (e.g. Interactive Highway Safety Design Model, Equipment for measuring signs and pavement marking retroreflectivity, Road Safety Audits, etc), the development of training workshops (e.g. Facilitator training for the Pedestrian Safety Roadshow), the deployment of technologies for test and evaluation (e.g. In-Service Trials/Technologies & Partnerships for Pedestrian Safety), the development of Safety Campaigns (e.g. Redlight-Running, Work Zone Safety, etc.) and the development of guidelines, safety brochures, PSA's or other safety related information packages (e.g. Safely Moving across America CD).

Each of these incorporate unique and different methods of evaluation, an example would be:

Older Driver Highway Design Handbook

First level of evaluation was based purely on demand for product—more than 7,000 copies were requested and disseminated.

Second level of evaluation was based on user/safety practitioner feedback to initial product—the safety practitioners, once exposed to the issues on accommodating the older driver in highway design and traffic operations, demand that a workshop be developed based on the above handbook, also numerous requests were made to FHWA for presentations at international (e.g. TRB, ATSSA, etc), national and state meetings.

Third level of evaluation was based on demand for indirect products—within a 30 month period FHWA conducted over 30 one-day older driver workshops, providing

classroom instruction and discussion to over 1,000 engineers and other safety practitioners from the state and local agencies.

Fourth level of evaluation is based on actual field deployment made by states and local communities—in this particular activity we are now evaluating this task.

Fifth level of evaluation is the measure of success—is to assess the fourth level of evaluation by collecting data before and after crashes and conflicts to determine success.

Sixth level of evaluation is inclusion into guidelines and policy issued by FHWA (e.g. AASHTO Green Book, MUTCD, etc.). This is measured by adoption of the state and inclusion in their policy and guidelines.

Finally, the last measure of the program—is in looking at the overall crash picture, with focus on the segments to gauge the relevant reduction in fatalities and injuries.

TECHNOLOGY DEPLOYMENT ACTIVITIES

Question. How much will be spent on technology deployment activities related to safety? How will this help the states?

Answer. $3,000,000 for fiscal year 2000. The "technology deployment" activities will help States by:

—Creating an awareness among top management and administrators of the benefits, impacts, and resources associated with safety process, countermeasures, and technologies.

—Providing information and demonstrations of proven state-of-the-art safety technologies to practitioners.

—Promoting concepts of new technologies, both hardware and software.

—Effectively showcasing safety processes, countermeasures and other related technologies.The technology deployment activities will assist in improving the road safety of the nation by accelerating the deployment/implementation of safety processes, countermeasures and other related technologies at the state and local level.

ROAD CONSTRUCTION WORK ZONES

Question. Please update your answer from last year regarding training programs to educate new drivers on the dangers of road construction work zones.

Answer. Currently PR # 42–01–0073 is being processed through Acquisition Management. The PR was designed to develop a national program effort to heighten the awareness of new drivers to the dangers involved with traveling through work zones. The program is scheduled to be awarded in September 2000 and consists of the following bullets:

(1) *Literature Search/Catalog*.—The first task is to collect as much information as possible on the available literature, videos, programs and other related materials and collect that into a training best practices guide, which will be sent to the Work Zone clearinghouse and appropriate State and local agencies.

(2) *Training Video*.—The video will concentrate on the dangers that work zone patterns present to new, inattentive, aggressive or speeding drivers.

(3) *Other Materials*.—A teachers/classroom manual, CD–ROM, posters and stickers are just a few of the additional products expected to be developed and distributed.

(4) *Outreach and Marketing*.—All products above are to be completed by the end of March 2001. Outreach (distribution of video, CD–ROM, manual, etc.) and marketing are to be completed before June 30, 2001.

(5) After one year the program is to be evaluated. A written report and oral presentation will be provided by September 30, 2002.

HUMAN-CENTERED RESEARCH

Question. Please break out and describe in detail your proposal to spend $1.730 million on human-centered research, paying particular attention to research aimed at helping the elderly.

Answer. The following table shows a breakout of our proposed spending on human-centered safety-related research:

Project	Request	Elderly-Related
Driver Perception of Curves and Run-Off-Road Accidents (Resident Study)	$350,000	X
Prototype Driver Models for Highway Design	300,000	X

Project	Request	Elderly-Related
Older Driver Handbook	.....	X
Driver Selection of Speed (Resident Study)	250,000	X
Driver Identification of Highway Hazards	.....	X
Support Services for HYSIM Simulator Laboratory (Resident Study)	330,000	X
Identification and Evaluation of Driver Errors	.....	X
Effects of Roadway Design on Traffic Speeds and Crashes	200,000	X
Traffic Control in Construction and Maintenance Zones	.....	X
Pedestrian, Bicycle and Roadway Integration (Resident)	300,000	X
Total	1,730,000	

All of the above projects are directed at making highways safer by incorporating the human element into the design of the infrastructure. Understanding the capabilities and limitations of drivers, pedestrians, bicyclists, etc. can have an important impact on roadway safety. All of the above projects involve the use of human research participants in investigations of human/roadway interactions, and each project includes the study of elderly participants to assess their special needs. The products of this research are used by state and local agencies, highway and traffic engineers and ultimately by the roadway-using public.

For example, the "Pedestrian-Bicycle-Roadway Integration" study investigates older and younger pedestrian recognition and comprehension of pedestrian crossing signals. Results of this study will lead to recommendations on crossing signals that are readily understood by older and younger road users. In the "Perception of Curves" project, driver age is a key component so that safety benefits can be extended to older and younger drivers. The "Speed Selection" project evaluates acceptable and unacceptable operating speeds and traffic volumes from the pedestrian's perspective, and will study pedestrians of all ages. The "Traffic Speeds and Crashes" project uses an Operating-Speed Estimation Method that will consider the most important design, operational, and environmental factors influencing drivers' perceptions of safe operating speeds. Driver characteristics, including age, will be studied in the development and calibration of the method. The "Older Driver Handbook" is an extremely popular product of our research effort. This Handbook gives guidance to highway and traffic engineers on improving roads and highways to accommodate the unique needs of the older driving population. Guidance is offered for improving the design of intersections, interchanges, roadway curvature, passing zones and construction and work zones, all from the perspective of the elderly roadway user.

SAFETY CAMPAIGNS

Question. What new safety campaigns are planned for fiscal year 2000 and fiscal year 2001? Please indicate funding amounts for each project.

Answer.

Pedestrian Engineering Outreach/Awareness (2000 start)

Goal.—To reduce the number pedestrian fatalities 5,220 (1998) that occur on our roadway each year. This program is intended for safety practitioners, the highway public, and other groups. Materials will be developed and disseminated (hard copy and electronic) focusing on pedestrian safety issues (e.g. Safety countermeasures—enhancing pedestrian nighttime visibility, geometric design issues, specific user groups, technologies—infra-red detection, and other processes).

Status.—Campaign started in fiscal year 2000.

Funds.—Fiscal year 2000—$200,000; fiscal year 2001—$330,000.

Run-off-Road Campaign

Goal.—To reduce the number of run-off-road crashes that account for almost ⅓ of all highway fatalities. This program will focus on three areas; keep the vehicle in lane, alert drivers when leaving their lane and minimize the impact of the vehicle in the event of running off the road. Materials will be developed and disseminated focusing on these issues, e.g. rumble strips, share-the-road, specific user groups, techniques to improve roadside safety, skid resistant pavement, improved geometric designs, traffic control devices, better and improved methods for measuring the retro-reflectivity of signs and markings.

Status.—Campaign started in fiscal year 2000.

Funds.—Fiscal year 2000—$200,000; fiscal year 2001—$300,000.

Speed Management Campaign

Goal.—To reduce speed related highway crashes (more than one-third of all fatal crashes). This program will focus on restoring the credibility of speed limits in the United States. This will include promoting Variable Speed Limits and Reasonable and Safe Posted Speed limits.

Status.—Campaign started in fiscal year 2000.

Funds.—Fiscal year 2000—$315,000; fiscal year 2001—$250,000.

Intersection Safety Campaign (fiscal year 2001 start)

Goal.—To reduce intersection related crashes (more than 22 percent of all fatal crashes). This program will focus on intersections (controlled and uncontrolled) and intersection related crashes. Focus will include traffic control devices, sight distances, geometric, etc.

Status.—2001 start.

Funds.—Fiscal year 2001—$200,000.

HIGH OCCUPANCY VEHICLE FACILITIES

Question. High occupancy vehicle facilities have drawn much attention around the country. How is FHWA helping state and local governments operate and maintain these facilities and how much of the fiscal year 2000 and fiscal year 2001 budgets will be allocated for this activity.

Answer. In May 1999, FHWA issued program guidance to reiterate and clarify its support of high occupancy vehicle (HOV) facilities as part of a regional or corridor approach to manage congested conditions. The guidance emphasized the need to evaluate the performance of HOV facilities over time, as one of the many strategies in the region to manage congestion.

In response to questions that were received from State and local agencies, the guidance also indicated when a Federal review of changes to the operations of HOV facilities is needed, and what should be included as part of that review.

Initiatives and associated funding for fiscal year 2000 and fiscal year 2001 include:

	Fiscal years—	
	2000	2001
Develop HOV System training course for state and local agencies	(1)	(2)
Develop case-study on New Jersey I–80 & I–287HOV lane conversions	$25,000	.....
Co-sponsor HOV System Conference	15,000	.....
Value pricing Ban alternative operating strategy available to optimize performance of HOV facilities	3 440,000	3 675,000
Technical guidance for state and local agencies on combining pricing and HOV strategies	(1)	.....
Guidance on use of HOV lanes by inherently low emission vehicles	(4)	.....

[1] Funded from prior year carry over funds.
[2] NHI course offering.
[3] Funded under the Value Pricing program.
[4] Internal staff effort.

MULTI-AGENCY INCIDENT MANAGEMENT

Question. How much is FHWA planning to allocate in fiscal year 2000 to support the development and maintenance of regional multi-agency incident management programs? Please describe those efforts and specify how the effectiveness of your efforts is evaluated. What new initiatives will be added in fiscal year 2001 and at what proposed costs?

Answer. The revision of the Incident Management Handbook will be delivered in Spring 2000. This handbook is a revision of the 1991 Freeway Incident Management Handbook and updates that handbook as well as adding a section on systematic program development for a regional multi-agency program. An "Implementation Guide for Regional Traffic Incident Management Programs" is being developed and will be completed mid-year 2000. This implementation guide discusses the steps needed to develop and sustain a regional multi-agency program from a strategic planning viewpoint. This document is intended to provide assistance in developing a multi-agency approach to strategic planning for incident management so that state and local agency goals are coordinated and budget development for resources needed from both state and local agencies is planned and coordinated. This strategic ap-

proach to incident management programs is missing in most regional programs. These efforts were funded under previous years' budgets.

FHWA will continue to provide technical support to the National Highway Institute's Incident Management Workshop in fiscal year 2000. The Workshop has been presented 42 times in 20 states from November 1998 through February 2000. The workshops are presented to mid-management level persons in various response agencies consisting primarily of police, fire, emergency medical, emergency management, transportation, emergency communications and planning as well as private sector partners in towing and recovery, hazardous materials and traffic information media. The workshops have been followed up by high level executive sessions involving state transportation and public safety directors in four states with two others scheduled in 2000. The Workshops include evaluation forms for participants to complete that are used to evaluate effectiveness of presentation and indicate which materials need updating. In fiscal year 2000, FHWA is providing $50,000 to allow the Workshop presenters to capture the incident management experiences of the participants to provide information toward the state-of-the-practice benchmarking activities.

A training course on Incident Management is being developed for FHWA field personnel. The purpose of this training course is to acquaint Resource Center and Division office personnel with both technical and institutional issues related to incident management and emergency services response. This training will better enable field personnel to assist State and local agencies in the development, refinement, and maintenance of regional multi-agency incident management programs. This effort is split-funded between fiscal year 2000 ($45,000) and fiscal year 2001 ($50,000), and will be delivered in fiscal year 2002.

The development of the IEEE P1512 Base Standard "Common Incident Management Message Sets for Use By Emergency Management Centers" has been completed. This standard will help provide a common communications framework for all regional incident management agencies. The standard was successfully balloted in November 1999. Comments received in the ballot process are now being resolved. It is anticipated that this standard will receive final approval by IEEE in early spring of 2000. These initial efforts were funded under previous years' budgets.

A new effort is underway within the US DOT to develop a strategy and program to facilitate the integration of transportation and public safety systems at both the technical and institutional levels. This effort is envisioned to also involve the Department of Justice, the Federal Emergency Management Agency and the Federal Communications Commission as well as police, fire, emergency medical and transportation professional associations. The goal of this effort is to improve the efficiency and effectiveness of public safety and transportation systems through improved communications and data transfer. While public safety communication systems have existed for many years, they are undergoing rapid technological advancement. At the same time new ITS systems and standards are being developed. The benefits of integrating the systems are numerous. The challenges are more institutional than technical. The development of ITS standards which affect existing public safety communications systems have made this effort essential.

Work will begin on a number of outreach and awareness initiatives in a multi-year program to provide information (technical issue documents, successful practices documents, etc.) which will facilitate good incident management practices. Initial efforts started in fiscal year 2001 at an estimated cost of $200,000, will address Incident Command (ICS) Procedures and Practices for Transportation Agencies and Liability Issues in Incident Clearance. ICS is an on-scene command and control protocol used by public safety agencies and not widely understood by transportation agency responders. Liability issues raised at incident scenes may result in lengthy delays in reopening roadways to travel. The liability issues are changing now and agencies may find themselves at greater risk for not taking aggressive clearance actions.

VALUE PRICING PILOT PROGRAM

Question. What are the status, accomplishments, and remaining challenges associated with the Value Pricing Pilot Program? What impacts on operations to transportation systems have resulted from this program?

Answer. *STATUS.*—As of February 29, 2000, approximately $2 million of the TEA–21 Pilot Program funds had been obligated to support local and Statewide value pricing planning and pre-implementation activities. Because authorizations to support the TEA–21 Pilot Program did not become available until fiscal year 1999 and authorizations had not been available to support the ISTEA Pilot Program in fiscal year 1996 and fiscal year 1997, new program initiatives were delayed until

applicants had time to move from initial project concepts to development of detailed project proposals that could support Pilot Program cooperative agreements.

Value pricing is likely to have far-reaching impacts on multiple parties and activities and localities have been extremely careful and deliberate in developing their proposals in order to include comprehensive assessments and outreach activities before a commitment to implement a project would be made. For this reason, even though FHWA has received many inquiries about the Pilot Program, and several areas are interested in applying to the program, only 4 cooperative agreements have been signed since funding became available to the program in fiscal year 1999. Two of those agreements are supporting projects in the State of California, a third agreement is supporting a pre-implementation study in the State of Maryland, and the fourth agreement is with the State of Minnesota. We anticipate that additional project agreements will be signed during the remainder of fiscal year 2000, with the States of Texas, California, Florida, New Jersey, New York and Connecticut being likely candidates for program participation. It is our expectation that at total of about $8 million to $10 million of program funds will be obligated through the end of fiscal year 2000, depending on the success of moving ahead with implementation at the local level.

The initial cooperative agreement was signed in February 1999, to continue the State of California effort to monitor the effects of the private sector road pricing project on State Route 91 (SR91) in Orange County. In September 1999, agreements were signed to support pre-implementation studies in the States of California, Maryland, and Minnesota. In addition, some of the projects funded with ISTEA funds are continuing with use of previous year funding, or are continuing as operating projects without Federal support. These operating projects are of particular importance because they are beginning to provide information about the impacts of value pricing on transportation systems.

ACCOMPLISHMENTS.—The FHWA and its state and local project partners have now had 9 years of experience with the Value Pricing Pilot Program and its predecessor, the Congestion Pricing Pilot Program. Over this time, the U. S. has become a world leader in investigating the potential of this innovative approach to ease traffic congestion. Fourteen project agreements have been funded over these years, and over $32 million in Federal funds have been provided to support these projects. Cities in all parts of the United States are showing interest in value pricing, and the experience being gained through the Pilot projects, as well as a private sector value pricing project in Orange County, California, is providing valuable information to transportation leaders in the U.S. and around the world.

Beyond the support being providing to state and local project initiatives, one of the key functions of the Federal program has been to establish a forum for discussion and exchange of information about value pricing. Regional workshops sponsored by FHWA and its project partners have fostered a high level of interest in value pricing in all parts of the United States. The most recent workshop, held in New York City, was highlighted by an announcement by the Executive Director of the New Jersey Turnpike Authority that value pricing would be established on the New Jersey Turnpike in the near future. This is just one example where value pricing is moving beyond the pilot program stage and is more widely being viewed as a way of managing demand on congested facilities and increasing the efficiency of the transportation system.

The ultimate test of the Pilot Program's accomplishments is, of course, the extent to which the projects supported with program funds move into the operational phase. In this regard we have had some exciting accomplishments. Operational projects are being supported in San Diego, California; Houston, Texas; and Lee County, Florida. In addition, program funds are being used to support a monitoring and evaluation study of priced express lanes on State Route 91 in Orange County, California. These projects are now providing some early results, which are summarized in the following section.

IMPACTS.—Perhaps the two most important findings resulting from the operation of the early pilot projects are that drivers do alter their behavior in response to variable pricing, and that highway users are receptive to value pricing if it can be shown to provide them with improved transportation services. In San Diego, where tolls on the I–15 Express Lanes vary dynamically with the level of congestion, value pricing has led to improved use of available HOV lane capacity, and has generated revenues to support express bus service in the corridor. The vast majority of highway users in the corridor view this project as a success, and the San Diego Association of Governments is studying the feasibility of expanding the express lanes operation to cover more miles of the I–15 facility.

In Lee County, Florida, the value pricing strategy has caused drivers to shift trips out of the peak-congestion period into the shoulders of the peak, leading to more

efficient use of available bridge capacity and improved service for bridge users. This project has been well received by bridge patrons, and the County is currently examining other value pricing options to improve local transportation service. Value pricing is also being offered in Houston, Texas, on the Katy Freeway's (I–10) HOV lane. This project has led to improved use of existing HOV lane capacity, allowing more people to be moved through the corridor. The project, after an initial infusion of start-up funds from the Pilot Program, has become financially self-sufficient, and users of the lanes report satisfaction with the service being provided.

The value pricing project with the longest history in the U.S. is the Express Lanes project on SR91 in Orange County, California. This is a privately owned and operated project, but the Pilot Program is supporting the State of California's monitoring and evaluation of the traffic and travel behavior impacts of the project. This project consists of variably-priced express lanes that were constructed in the median of SR91. The project has shown that value pricing can be used to maintain free-flow traffic conditions, and that motorists value having the option of paying to receive improved transportation service in this highly-congested corridor.

In sum, the early results from pricing projects in the U.S. are showing that travelers are willing to pay for improvements in transportation service, and that pricing can lead to more efficient use of existing highway capacity. People do respond to price signals when making transportation decisions, just as they do in other parts of their economic lives, and those responses can serve as important investment guides for transportation planners and policy makers.

REMAINING CHALLENGES.—The major challenges surrounding value pricing and the Value Pricing Pilot Program continue to be the challenges of project design and public acceptance. The pilot tests that have been initiated to date are pathbreaking projects that show great promise for the future of value pricing in transportation. Yet, these projects have been limited in both geographic scope and variety of pricing innovations. Operational projects have been launched in California, Texas and Florida. Even though interest exists in other parts of the country, resistance to exploring new ways of charging for road use has not yet been overcome. Peak-period value pricing charges have been tested on a newly-constructed express lane facility and on existing HOV lanes with excess capacity, and off-peak toll discounts have been tested in Florida. Efforts to move beyond these initial concepts have yet to be undertaken.

The challenge of the Pilot Program is to continue to test the successful concepts in new areas, and to move beyond the initial pricing concepts to new applications of value pricing, including variable pricing on existing toll facilities, pricing of newly constructed highway facilities, parking pricing, and other innovative concepts. Continued information sharing and public outreach through the Pilot Program approach has an important role to play in expanding the number and variety of pilot tests. These tests show how greater use of pricing principles in highway transportation can help bring more rationality to transportation investment decisions, and can lead to significant reductions in the billions of dollars of economic waste associated with traffic congestion.

WEATHER IMPACTS ON HIGHWAY OPERATIONS

Question. How much are you spending in fiscal year 2000 and in fiscal year 2001 to help state and local highway agencies mitigate the impact of changes in weather on highway operations? How will this information be used by road users and operators? Please specify projects and their associated funding levels.

Answer. Proposed spending on research efforts in ITS and Operations research funds, including field tests, to mitigate the impact of changes in weather on highway operations is as follows:

	ITS	Operations	Total
Fiscal year:			
2000	$2,100,000	$100,000	$2,200,000
2001	1,900,000	100,000	2,000,000

The heart of the weather and winter mobility program aims to improve surface transportation outcomes under adverse weather through the development of better (accurate, reliable, appropriate, and readily available) road weather information. This vision recognizes that the wealth of weather information available today is not tailored for road users and operators, and hence leads to system inefficiencies. Therefore, efforts under this program aim to develop improved decision aids for the host of road users and operators. Work to date consists of documenting the specific

information needs of all users and operators, and translating these needs into system requirements. Such an effort serves two purposes: (1) it provides us with the material needed to work with the federal weather community (e.g., the National Weather Service) to see that their weather products and services satisfy these requirements, and (2) it provides us with the foundation for further research and field testing. The bulk of this research and field testing is on these decision support systems that fuse and filter the seemingly unending weather information and present it to road users and operators in a manner that is easily interpretable. This will ultimately lead to improved decision making because the users and operators will be presented with road weather information that fits their specific requirements, rather than having to make decisions based on generic weather information.

To that end, the following research projects and field tests are proposed for fiscal years 2000 and 2001:

Fiscal year 2000:	
Refinement of Surface Transportation Weather Requirements	$300,000
Develop Decision Support System for Winter Maintenance	600,000
Environmental Sensor Station Siting and Road Condition Forecasting Evaluation	750,000
Assimilation of Road Condition Observations	450,000
Outreach and Training (e.g., support AASHTO Snow & Ice Cooperative Program, PIARC, regional maintenance conferences, etc.)	120,000
Total	2,220,000
Fiscal year 2001:	
Refinement of Surface Transportation Weather Requirements (continuation of fiscal year 2000 project)	250,000
Field Test of the Winter Maintenance Decision Support System	750,000
Develop Decision Support System for Travelers	800,000
Evaluation of Automated Anti-icing Spraying Systems	100,000
Outreach and Training	100,000
Total	2,000,000

Of the above totals, $2,100,000 in fiscal year 2000 and $1,900,000 in fiscal year 2001 are derived from the ITS program budget.

TECHNOLOGY TRANSFER CHALLENGES

Question. What are the basic R&D and technology transfer challenges facing the operations CBU?

Answer. We are currently in the process of identifying those issues in order to form a 5-year operations research and technology agenda. The first national discussion of those issues was held April 3rd thru 5th at the Institute of Transportation Engineers Conference in Irvine California. The results will be incorporated in the report from Transportation Research Board's National Transportation Research Partnership.

Initial hypotheses and anecdotal evidence suggest that some of the primary challenges in improving operations of the surface transportation system are:

1. Institutional and cultural: Existing institutions are extraordinarily fragmented and often have no institutionalized processes or lines of communication for sharing information or responses in systems operations. Most of the institutions are organized to carry out capital projects. The existing planning process is oriented toward capital planning. It generally does not include the operations stakeholders nor are there processes in place for discussing and systematically dealing with planning for operational improvements.

2. Tools: There are few planning tools that will help assess the value of operations improvements. Most models have a 5, 10, or 20 year horizon and are geared to a one time capital decision. Operations tools need horizons of minutes.

3. Skill and priority: In part because federal policy has been skewed toward capital investment, operations have been forced to compete in the local budget arena. Evidence suggests it is becoming "deprofessionalized" rather that increasingly professionalized. Funds and skill are apparently not available for even maintaining and updating timing of traffic signals. Awareness of the consequences of this neglect in terms of congestion and safety will be a major hurdle to overcome.

4. Adequate ITS infrastructure: Although we are making progress, installation of sufficient ITS infrastructure for surveillance and management purposes continues to be a challenge. Even in areas with substantial existing and planned infrastruc-

ture, integration of infrastructure and information across jurisdictional, modal, and functional boundaries remains an issue.

WORK ZONE DELAYS

Question. Work zone delays are a continuing issue with the traveling public. How much are you spending in fiscal year 2000 and in fiscal year 2001 to help state and local highway agencies address this area? Please describe the scope and nature of your activities and their associated funding levels on a project-by-project basis.

Answer. The Operations CBU's efforts cut across other offices within FHWA. In addition to the $660,000 which is dedicated from Operations, an additional sum of $500,000 is being provided by the Safety CBU as part of FHWA's overall Work Zone initiative. The additional funds are incorporated into the cost figures below.

The work zone budget for fiscal year 2000 and fiscal year 2001 is as follows. Details of these efforts follow.

	Fiscal years—	
	2000	2001
Best Practices Guide Book	150,000	75,000
Work Zone Awareness Week	50,000	50,000
Technology Scan	35,000	250,000
Delay Measure, Decision Tool & Guidance to reduce delay	865,000	825,000
Training	60,000	250,000
Total Work Zone Operations	1,160,000	1,450,000

Best Practices Guide Book

Development of a Work Zone Best Practices Guidebook is being carried out in partnership with the American Association of State Highway Officials (AASHTO). The guidebook presents a collection of highway community best practices, which focus on minimizing driver and worker exposure in construction and maintenance work zones. With this guidebook a process is established to update and maintain an initial set of best practices, allowing the continued sharing of highway agency success stories with practitioners across the Nation. Regional seminars, which present the information in the guidebook and encourage additional sharing of best practices are now being planned. To supplement this guidebook, a checklist is under development that will facilitate identification and correlation of practices, appropriate for each stage of the project planning, design, and implementation processes.

Work Zone Awareness Week

FHWA is partnering with AASHTO and the American Traffic Safety Services Association to sponsor National Work Zone Safety Awareness Week. The event is intended to heighten motorist and worker awareness of the dangers encountered when driving through highway construction and maintenance work zones. Through a network of government and industry partners, media events and community outreach will focus on education and awareness.

Delay Measure, Decision Tool, and Guidance to Reduce Delay

There is a need to develop user-friendly computer software tools which accurately analyze and reliably predict work zone impacts. FHWA has initiated development of decision making tools which will allow practitioners involved in the project preplanning, planning, development, and construction phases to weigh alternate strategies to mitigate the mobility and safety impacts resulting from work zones. Development of the first spreadsheet tool, which we are calling "Quickzone," is underway with field beta testing to be accomplished this summer, and full release planned for April 2001. In parallel with development of the decision making tool, FHWA will investigate work zone delay measurement practices and techniques, and work to quantify current national impacts, and develop guidelines for quantifying delays.

Technology Scan

In fiscal year 2000, FHWA will initiate a "Technology Scan" to showcase state-of-the-art technologies. With this activity, new and emerging work zone technologies, focused on improving mobility and safety, will be identified, demonstrated and shared with the highway community through field testing, evaluation and several multi-State workshops. Improving mobility and safety on the Federal-aid high-

way system, in light of construction and maintenance operations, is the goal of this activity, and technologies scanned will range from traveler information techniques, traffic management practices, means of contracting, and improved materials/methods of construction.

Training

In fiscal year 2001, FHWA will develop a Work Zone Traffic Management Training program. This training will facilitate an organizational understanding of work zone traffic management principles, shifting attention from the traditional site specific traffic control. The training will focus on integrating work zone traffic management principles into the early phase of project planning.

MULTI-MODAL FREIGHT ANALYSIS

Question. What is the purpose of the research effort on Multi-Modal Freight Analysis Framework?

Answer. A new era in freight transportation is emerging. It is driven by competitive global trade, new business and logistical practices, and increasing reliance upon information technology. The purpose of the multi-modal freight analysis is to:

—Marshal and/or develop freight analytical models, data sources, communication channels, and professional expertise (taken as a whole, these will provide freight intelligence support for the FHWA, the Department, State and local jurisdictions, and other public and private sector partners and investors who are seeking to improve freight service);

—Define the essential functions of the U.S. and North American freight corridors, connectors, and intermodal terminals; the varied challenges to these freight system components' continued performance, as defined by their current condition, extent, probable evolution, and investment needs;

—Enhance the ability of the FHWA and state and local governments to evaluate alternative infrastructure investment strategies vis-a-vis alternative private sector investment strategies. For example, major highway capacity investment for the purposes of intermodal goods movement improvement needs to match port capacity investment which in turn needs to match shipper and carrier business strategies.

Question. What end-products do you anticipate from this investment? How much will be allocated?

Answer. End products will include national databases on freight flows and models capable of analyzing alternative infrastructure investments relative to alternative futures and business practices. Spending will be extensive: $900,000 was set-aside in fiscal year 2000; $750,000 is requested in fiscal year 2001.

Question. How will this research help state and local governments? What do you anticipate as achievements from your research on freight performance measurement? How does the initiative support, or mesh with, other freight initiatives being conducted by the Operations CBU? How much are you planning to spend in fiscal year 2000 and fiscal year 2001 on this research?

Answer. State and local governments will be better able to evaluate and justify intermodal infrastructure investments. Performance measurement is required as part of the FHWA and DOT strategic plans, consistent with the GPRA. Measurement offers us the opportunity to more quantitatively assess system performance and efficiency relative to a critical user B shippers, carriers and ultimately the American public. Literally millions have been spent on measures and models for estimating system performance and investment benefits relative to the commuter. Very little has been spent to measure similar performance for goods movement. The advent of e-commerce makes such measures increasingly critical.

Our efforts include a search for one or two validated national measures to diagnose problem areas in freight transportation, and to help us evaluate significant system investments. This research also seeks to define specific measurements to use in assessing freight corridor and border crossing movements. Research to date has pinpointed some potential measurements that we may be able to use to diagnose problem areas and generate solutions. Our next step is to present these measurements to our partners and together seek consensus on an adequate measure or set of measures. This initiative involves more than simply establishing designated measurements' relevance to highway freight transportation. It also seeks to address more pragmatic concerns, such as the potential availability of reliable data and databases to support measurement, and the accessibility of privately held industry data for public use.

Ultimately, the application of performance measurements will support agency strategic planning and become an important component of our multi-year initiative to produce a freight analysis "framework," a major effort to evaluate the current

condition of U.S. and North American freight transportation, generate future scenarios of need and opportunity, evaluate potentially advantageous public policies, and knowledgeably design strategic public sector investments to improve freight performance and mobility. $250,000 was provided in fiscal year 2000 and a similar amount is proposed for fiscal year 2001 for this research.

NATIONAL ECONOMIC COMPETITIVENESS

Question. Why is FHWA's Freight Management Office conducting research and conducting projects that deal with our national economic competitiveness and economic growth? How much money is being allocated for research and projects in fiscal year 2000, and proposed for fiscal year 2001? How will this help state and local governments? Please break out specific projects and associated funding levels.

Answer. A primary justification of federal involvement in and investment in transportation is to aid interstate and international commerce. Several studies have recently shown (notably one completed by Booz Hamilton, another by GAO, and the FHWA draft NHS Connector Study) that freight related infrastructure investments tend to fare poorly in the local planning process unless they can be justified based on benefits to passenger travel. One reason is the lack of analysis tools to demonstrate quantitatively the benefits of a freight related investment and how those benefits are likely to be distributed.

During 2001 and 2002, we are seeking to develop a national perspective on needed investments in, and improvements to, our national competitiveness and economic growth. Subsequently, in 2003 and beyond, we are proposing to expand our focus to include more local needs by developing investment "tools" for our state and Metropolitan Planning Organization (MPO) partners that can be used to assess the costs and benefits of freight projects.

These tools will help local officials to understand both the importance and the effects of freight investment on their region's economic productivity. Equally important they will assist in evaluating the distribution of benefits relative to the distribution of costs (both monetary and environmental).

The FHWA has allocated $500,000 for investment work in fiscal year 2000. We have proposed $750,000 in fiscal year 2001.

TRAFFIC CONTROL DEVICES

Question. What new tools, research, and skills are you working on to help state DOTs operate and maintain their highway systems more effectively?

Answer. The Operations Core Business Unit will be releasing the updated edition of the Manual on Uniform Traffic Control Devices in mid fiscal year. This Manual contains the standards for signs, traffic signals, and pavement markings, and incorporates the latest technologies and research, especially of the needs of older drivers, relating to the use of these traffic control devices to improve the flow and safety of all roads opened to public travel. Once the Manual is released, the text and figures will be available on our web site, http://mutcd.fhwa.dot.gov, and available on CD–ROMs. We will be working with the professional and contractor organizations to provide training for their staffs.

Snow, ice, fog, rain and other inclement weather reduce the capacity and safety of road systems. The surface transportation weather forecasting requirements will be developed and ready to serve as a basis for FHWA to engage the weather forecasting community in preparing weather forecasts for the surface transportation operations managers and the traveling public, just as they do for the aviation users. Using weather forecasts focused on the surface transportation system, as opposed to the use of general, area wide forecasts, operations managers will be better prepared to respond to snow removal, roads restricted by high water or trees, and roads with reduced visibility. Additionally, the FHWA will be completing the development and beginning the testing of a winter maintenance weather decision support system for managers and traveler information for travelers.

In the area of improved work zone operations, FHWA will be developing decision-making tools which will allow practitioners to evaluate alternate strategies to mitigate the mobility and safety impacts resulting from work zones. Other products that will be developed include work zone traffic management training, and guidelines on reducing construction times, on higher quality pavement, innovative contracting and innovative construction practices.

The Operations CBU will provide guidance to agencies on how to consider transportation systems operations during transportation planning processes. Also, guidance will be provided to operating agencies on how to better plan for improved system operations and maintenance from a performance-based perspective.

We will also continue to develop and deliver technical guidance and training in a number of operational areas, such as traveler information, traffic management, incident management, arterial management, HOV facilities, and travel demand management.

The ITS Deployment Analysis System (IDAS) will be released through McTrans this spring. IDAS is a cost benefit software tool that helps communities determine the costs and benefits of implementing specific ITS improvements. In addition to its upcoming release, a training course is under development that will show our state and local partners how to use IDAS most effectively. The training course will be ready in early next fiscal year and the Operations CBU will work through our field staff and resource centers to ensure its wide distribution.

Research on Adaptive signal Control Systems (ACS) is continuing. ACS will allow traffic signal control systems to respond to current traffic conditions in real time. Currently, three alternative algorithms have been developed for various conditions, and are being field tested. The field tests will be completed next year, and, ultimately, the algorithms will be made commercially available shortly thereafter.

The Operations CBU is continuing to advance the widespread deployment of Incident Management programs around the country. We are continuing to work with NHI to deliver approximately two incident management workshops per month. These multi-agency workshops cater to DOTs, police, fire, emergency medical personnel, and emergency communications operators. Also, a new Incident Management Handbook will be released this spring, updating the 1991 manual which documents best practices and procedures and key issues in incident management. An Incident Management Implementation Guide will also be released this spring which is geared toward helping communities develop an institutional framework for sustained incident management programs in the long term.

Turbo Architecture is also being released this spring. Turbo Architecture is a tool which was developed in response to our partners' needs in developing regional ITS architectures. It walks the users through the National ITS Architecture by a question and answer process, and helps to develop regional and local ITS architectures which will be consistent with the National ITS Architecture. It will be rolled out this spring at the ITS America Annual Meeting and then made available for distribution through McTrans. Training courses are also underway which will be provided through NHI when completed early next fiscal year.

TSIS version 5.0, which is one of the most comprehensive traffic simulation models in the world, is currently under development. This new user-friendly version will provide for an easy user data inputting interface. Once complete, TSIS 5.0 will enable our state and local partners to simulate freeways and large street networks for alternatives analyses and planning. When complete, it will be made available to our partners through McTrans.

In the area of ITS training, we have trained almost 9,000 people in various travel management topics geared toward the operation and management of the transportation system. We have also trained over 3,000 people in CVO courses, and over 12,000 people have seen the CVO technology truck. The ITS training program has been so successful that we are now seeing several states tailoring our courses to meet specific their needs, including California, Virginia, Florida, and Utah. FHWA Divisions and Resource Centers continue to reach many people in the profession. Associations such as ITE and ITS America are now developing and delivering coursed under their own banners. ITE standards courses have reached over 2,000 people. The thrust of the ITS training program development now focuses on distance learning. In other words, providing the key technical training courses to the people who need them, when and where they can obtain the training. We are currently piloting three web-based training courses through which we plan to reach many people in the profession.

OPERATIONS CORE BUSINESS UNIT

Question. Please discuss the scope and nature of your fiscal year 2000 highway operations program and indicate the amount and purpose of each relevant contract funded under that sub-account.

Answer. The objective of the Operations Core Business Unit is to optimize the performance of the transportation system through unifying all aspects of the surface transportation system. Within the 5 offices of the CBU, there are 73 FTP, including the JPO, dedicated to this task. The Transportation Operations Office handles safety and mobility in construction/maintenance operations, Weather initiatives, MUTCD, and Emergency Preparedness. The Office of Travel Management is responsible for ITS Deployment, HOV Systems, Operations Planning Guidelines, Congestion Management, Value Pricing, and Highway Capacity Analysis. The Office of

Freight Management and Operations handles Size and Weight Enforcement, border crossings, National Freight Partnership, Multi-state freight corridor development, National Highway System connectors, and the Intermodal investment framework. The Office of Technology Services is responsible for strategic planning, communications and outreach, legislative coordination, research development and technology coordination, policy coordination, and training support/university programs. The ITS Joint Program Office is responsible for DOT-wide ITS coordination, the Intelligent Vehicle Initiative, Standards, Architecture, and Evaluation and coordinates with many of the initiatives throughout the other offices of the CBU.

The JPO maintains its role as a separate unit that serves all of the Department for ITS development and benefits from the organizational support as an office within FHWA. The Director of the JPO is also the Director of the Operations CBU. In its Department-wide functions, the JPO continues its extensive coordination and close working relationships with program managers and senior officials in FHWA, FRA, NHTSA, and FTA on the research, development and deployment of ITS technologies. As an office within FHWA, the JPO benefits from the program and administrative support of the agency and also relies on the FHWA field organization to support its initiatives. With the creation of the Operations CBU, FHWA better positioned itself to carry out the strategic direction set by the JPO and to take a leadership role in using the ITS infrastructure that is being put in place across the nation.

In fiscal year 2000, the Operations Core Business Unit is pursuing four strategies to advance more efficient operations as outlined in the Mobility goal of the strategic plan:

1. Complete key ongoing initiative and invest in a limited number of high impact "low hanging fruit" including: a. Completing the Manual of Uniform Traffic Control Devices; b. Launching a major Work Zone research and tech transfer initiative; c. Continuing the FHWA weather response initiative.

2. Invest in supporting the deployment of the ITS infrastructure including: a. Architecture consistency guidance and training; b. Completing two-thirds of the proposed ITS standards and launching testing and training; c. Implementing service plans in 55 of 78 largest metro areas; d. Completing the ITS Deployment Analysis System, a tool for planning ITS deployment; e. Developing and testing low cost adaptive control for small communities.

3. Invest in laying an information, measurement and institutional foundation for operations, including: a. Benchmarking; b. Developing options for national and local performance measures; c. Conducting national conferences and regional workshops to begin developing planning guidelines, developing a research agenda, and establishing local operations institutions.

The Operations Core Business Unit will pursue four strategies to improve the efficiency and productivity of freight movement. 1. Conduct analyses necessary to develop a cohesive set of long term freight improvement strategies; 2. Invest in corridor and border improvements thru the sec. 5118 and 5119 Borders and Corridor Program; 3. Continue to nurture multi-state freight/trade institutional partnerships to leverage public and private investments in freight related infrastructure and intermodal operations improvements; 4. Develop and test key elements of ITS technology.

The following chart shows the funding for the major programs for the offices in the Operations CBU in fiscal year 2000:

Projects by Office	*Fiscal year 2000*
Freight Management:	
Decision-making Framework	$1,600,000
Institutional Partnerships	150,000
Performance Measures	250,000
Transportation Operations:	
Work Zone Operations (includes $500,000 from Safety CBU)	[1] 1,160,000
Manual on Uniform Traffic Control Devices	375,000
Improved Weather Response	100,000
Emergency Preparedness	135,000
Travel Management:	
Freeway & Incident Management & Operations	195,000
Arterial Operations and Traffic Control	230,000
Travel Demand Management	50,000
Performance Analysis & Tools	325,000
Operations Technology Services:	
Measures of Success	500,000
Operations Outreach/Awareness and Institution Building	861,000
AASHTO/FHWA International Scan	40,000

Projects by Office	*Fiscal year 2000*
Congressionally Mandated Studies	3,932,000
TOTAL	9,903,000

[1] Includes $500,000 from the Safety CBU for Work Zone initiatives.

FISCAL YEAR 2001 BUDGET REQUEST

Question. Document how the fiscal year 2001 request ensures program continuity with the fiscal year 2000 spending plan.

Answer. The 2001 budget request proposes to continue the strategies outlined in the answer to the previous question. For example:

—The budget request will support nationwide dissemination of the final MUTCD rule that will completed by fiscal year 2001.

—It will provide extensive training and outreach to state and local agencies on proven ways to improve the safety of work zones and to efficiently manage work zones. This will include development and training on analytical tools to reduce construction times and the costs of work zone delays.

—FHWA will continue programs to benchmark and share best practices in travel management systems to help state and local governments to use their current traffic systems most effectively and to deploy ITS technologies and advanced techniques to improve the performance of their system.

—We will continue development of the Freight Analytical Framework launched in 2000.

—We will develop freight cost benefit analysis tools based on data collected in the year 2000.

—We will gain consensus on and test performance measures developed in 2000.

—We will continue regional workshops started in 2000 and add the self-assessment "operations audit" tool to the discussion.

PAVEMENT RESEARCH

Question. Why are you proposing to decrease the amount for pavement research funded out of the surface transportation R&D account?

Answer. The surface transportation research provisions of TEA–21 provide a fixed amount of authorized funds each year, which do not rise in conjunction with the growing demands from emerging or expanding areas such as transportation operations, freight, the environment and policy issues. This has forced FHWA to make difficult decisions on relative program priorities and some areas do show funding reductions, as reflected in the request for surface transportation research funds for pavement research being reduced in fiscal year 2001 over the fiscal year 2000 level. We certainly recognize the value of continuing to advance innovation through pavement-related R&T efforts and we have been reluctant to cut financial resources provided by current TEA–21 authorizations, but we feel this has been unavoidable given the current R&T funding environment. As outlined in response to the next question, we have proposed that additional funds be authorized beyond current TEA–21 levels to address this critical need.

Question. Your table comparing pavement research for fiscal year 2001 to that for fiscal year 2000 funded from the surface transportation research account shows a substantial reduction in funds for this research category. Please explain the strategic thinking behind this request.

Answer. Strategically, we do believe that there is a critical need to continue essential pavement-related R&T activities within the highway community, as this is a very high-priority area among our partners and customers. To achieve continuing advancement while FHWA funding is reduced (as noted in the answer to the previous question), we have worked very closely with key partners on collaborative approaches; and our State DOT partners, in particular, have been very responsive to this effort. The pavements area is a good example of where such partnerships have been successful, as funds from State DOTs have supported critical pavements-related work. However, our state partners have made their belief clear that additional Federal resources are needed for these efforts, and FHWA has taken the initiative to request that additional R&T funds be authorized beyond current TEA–21 levels. This FHWA request for a total of $50 million in additional funds ($40 million in surface transportation research, $6 million in technology deployment, and $4 million for training and education) includes a significant portion for pavement R&T to address the current shortfall in R&T.

RESEARCH AREAS

Question. What has been done in response to the fiscal year 1999 conference committee's encouragement to support research into geosynthetic materials, the use of polymer additives for pavements, lithium-based technologies, and composite bridge systems with funds provided for pavements? How much will be allocated for these research areas in fiscal year 1999 and in fiscal year 2000?

Answer.

Geosynthetic Materials

The FHWA technical representatives met with Montana DOT and the Montana State University. A Work Order contract was established in fiscal year 1999, to conduct the above effort. Since directed activities exceeded funds provided under the legislation, only $600,000 was available for this effort in 1999. The Montana DOT, the FHWA, and the University representatives have formed a technical advisory group for this project. On January 25, 2000, the Montana State University produced its 1st interim report on this effort. This report contains the results of their work to model pavement performance and applicability for pavement design.

Polymer Additives for Pavements

In fiscal year 1999, the FHWA was encouraged by the conferees to investigate polymers produced by Martin Color-fi Incorporated of Edgefield, South Carolina. In December of 1998, FHWA hosted a meeting with Martin Color-fi, a producer of polyester fibers, to discuss the FHWA polymer research program and to learn about the polymers produced by this company.

The fiscal year 1999 appropriation provided funding of $1,500,000 for this effort. However, the pavements' program stipulated by the original legislation and fiscal year 1999 appropriations totaled more than the allotted budget. Subsequently, activities called for under the fiscal year 1999 appropriations were only funded at 60 percent. Therefore the actual funding provided for this effort was $900,000. In fiscal year 1999, this funding was used by FHWA to support the development of the chemically-modified product and to provide detailed laboratory analysis. Planned expenditures in this area for fiscal year 2000 are $625,000.

Lithium-based technologies

Regarding research on lithium-based technologies (to mitigate alkali-silica reaction in concrete), there were no funds specifically designated for lithium work in fiscal year 1999. In fiscal year 2000, $500,000 was allocated specifically for lithium work. In November 1999 and January 2000, FHWA met with lithium industry representatives to discuss research and implementation needs, and several potential projects were identified. An expert panel has been formed to assist FHWA in planning and selecting projects, and the panel will be meeting in early May to define the projects to be funded with fiscal year 2000 monies.

Composite Bridge Systems

On September 2, 1999, a cooperative agreement was signed with West Virginia University. Funding for fiscal year 1999 was $600,000 in federal funds, with $150,400 in matching funds from the university. The project is investigating the applicability of composite materials for dowel bars and reinforcement normally made of steel for use in concrete pavements.

SECOND GENERATION COMPOSITE BRIDGE DECK SYSTEMS

Question. What was accomplished in response to the fiscal year 1999 conference committee's encouragement to develop second generation composite bridge deck systems and technologies that may lead to better constructed and longer lasting pavements? How much will be allocated for these research areas in fiscal year 1999 and in fiscal year 2000?

Answer. On September 2, 1999, a cooperative agreement was signed with West Virginia University. Funding for fiscal year 1999 was $600,000 in federal funds, with $150,400 in matching funds from the university. The project is investigating the applicability of composite materials for dowel bars and reinforcement normally made of steel for use in concrete pavements. In fiscal year 2000, it is anticipated that no additional funds will be allocated for this effort.

LONG-TERM PAVEMENT PERFORMANCE (LTPP)

Question. Please bring us up to date on the progress, accomplishments, challenges, and outlook for the LTPP, as well as the integration of this effort with the pavement R&D program proposed for this fiscal year.

Answer. The progress, accomplishments and challenges for the LTPP are described in the LTPP: 1999 YEAR IN REVIEW, FHWA–RD–00–020. Highlights of the progress and accomplishments include the release of the DataPave 2.0 software. DataPave is a CD–ROM version of the LTPP database that provides the LTPP data in an easy to understand and use format. DataPave 2.0 is a two CD–ROM set that includes triple the amount of data in DataPave 1.0. FHWA and the American Society of Civil Engineers sponsored a contest in the analysis of the LTPP data. The contest winner in 1999 presented a new method of analyzing and understanding the profile of concrete pavements that has the potential to greatly improve the performance of future concrete pavements. Another product that was improved and released is the LTPPBind 2.1. The improved LTPPBind has more information and significant improvements in functionality. This software enables highway agencies and industry in the selection of the most cost effective Superpave binders. Lastly, the LTPP is cooperating with the National Cooperative Highway Research Program efforts in the development of the 2002 Pavement Design Guide. The LTPP plays a critical role in the development of the new guide as the source of pavement data for the validation and calibration of the new Guide and in several instances as a source of information and procedures in the use of the new Guide.

The principal challenge facing the LTPP is adequate funding. Although TEA–21 provides $10 million per year for the LTPP, this is insufficient to operate the program. This shortfall in funding has been addressed by the State highway agencies. Through the National Cooperative Highway Research Program the states have provided $4.7 million in 1999 and $5.025 million in 2000 for the LTPP. These funds are used for data collection, analysis and product development.

The outlook for the LTPP is very positive. The program is producing the quality data, analysis results and products that the State highway agencies want. KEY FINDINGS from the LTPP Analysis, 1990–1999, FHWA–RD–00–085 provides an overview of the significant findings and results from the analysis of the LTPP data.

The LTPP data, analysis findings and products are being integrated into FHWA's pavement technology program. An example is the National Highway Institute course entitled Concrete Pavement Design Details and Construction Practices which includes a concrete pavement design procedure validated and calibrated with the LTPP data and analysis. The course will be updated to include a number of the LTPP findings on better performing pavements.

WOOD DEPOSITS AND LITHIUM TECHNOLOGY

Question. In House report 106–180, Congress encouraged FHWA to support research into wood deposits and lithium technology to mitigate the damage from alkali silica reactions. How much money was allocated for this project in fiscal year 2000, and how much is requested for fiscal year 2001? What progress has been made since last year?

Answer.

Wood deposits (s/b composites)

The Federal Highway Administration has entered into a cost sharing contract with the University of Maine to develop advanced wood composites for bridge construction. The government has obligated a total of $900,000 ($600,000 in fiscal year 1999 and $300,000 in fiscal year 2000) to this contract. The objective of the contract is to obtain the services of the University of Maine's Advanced Engineered Wood Composites Center, its researchers, and engineers to conduct research on fiber-reinforced glulam technology for the next generation of vehicular wood bridges. The exact nature and extent of the Contractor's work will be based on task orders issued by the FHWA.

Lithium technology

$500,000 was allocated in fiscal year 2000 specifically for lithium work. Additional funding has not been requested for fiscal year 2001. In November 1999 and January 2000, FHWA met with lithium industry representatives to discuss research and implementation needs, and several potential projects were identified including field trials, information booklets and guidelines, and research. An expert panel has been formed to assist FHWA in planning and selecting projects, and the panel will be meeting in early May to define the projects to be funded with fiscal year 2000 monies. In the months following this meeting, projects will be advertised and selected.

GEOSYNTHETIC MATERIAL RESEARCH

Question. In the fiscal year 2000 conference report, the conferees encouraged the FHWA to provide up to $400,000 for geosynthetic material research, and up to $1,500,000 to study the potential benefits to federally funded highway projects and

asphalt surfaces of early application of emulsified sealer/binder and research related to development of low cost pavement with flexibility to tolerate heaves in extreme climates. What has FHWA done to implement this request? How much will be allocated during fiscal year 2000 on those activities?

Answer.

Geosynthetic Materials

For fiscal year 2000, the Senate Committee on Appropriations has directed that an additional $400,000 be allocated to this effort. Since Congressional directed activities for fiscal year 2000 exceed funds provided under the legislation, only $200,000 is available for this effort in fiscal year 2000. On May 1, 1999, the representatives from the Montana DOT, the FHWA Montana Division, and the Montana State University will meet as part of a conference on geosynthetic materials. Work plans for utilizing these new funds will be finalized. The Montana State University has submitted a draft proposal for these additional funds and efforts are underway to modify the existing agreement to accommodate this additional research.

Asphalt surfaces

In the area of asphalt surfaces, early application of emulsified sealer/binder and research related to development of low-cost pavements with flexibility to tolerate heaves in extreme climates, the following is planned for fiscal year 2000. In fiscal year 2000, FHWA will provide up to $375,000 to study the potential benefits to federally funded highway projects and asphalt surfaces of early application of emulsified sealer/binder. It is intended to conduct the workshop(s) through FHWA's cooperative agreement with the Asphalt Institute to identify a course of action based on user needs in this area. Based on the proceedings, develop a work plan for test sections, identify sites for test sections, develop a work plan for monitoring the test sections, award contracts of the placement and monitoring of the test sections and conduct a "Lessons Learned" workshop at the close of the project(s) to implement the results.

FHWA will provide up to $375,000 to research related to development of low-cost pavements with flexibility to tolerate heaves in extreme climates. To this end, the following will be conducted, establish points of contact at the FHWA Alaskan Division Office and Alaskan Department of Transportation, initiate a meeting between FHWA, Alaskan DOT, Industry, and Academia to discuss possible research activities, develop a statement of work and initiate a contract and requests for proposal and award and conduct the research.

POLYMER ADDITIVES

Question. In the fiscal year 2000 conference report, the conferees encouraged FHWA to provide up to $1,250,000 for research costs associated with constructing a segment of highway utilizing a binder composed of polymer additives and to work with the South Carolina State University and Clemson University to further research in this area. What has FHWA done to implement those studies? How much will be allocated during fiscal year 2000 on those activities?

Answer. In December of 1999, at the request of FHWA, the South Carolina Department of Transportation (SC DOT) hosted a meeting which included representatives from South Carolina State University (SC State), Clemson University, SC Asphalt Pavement Association, Martin Color-fi (SC polymer producer), and industry. SC DOT will be constructing a segment of highway utilizing binders composed of polymer additives in the Spring of 2000. SC State and Clemson are currently developing a work plan to provide the project with on site testing and continued monitoring.

The fiscal year 2000 appropriation provided funding up to $1,250,000 for this effort. However, the pavements' program stipulated by the original legislation and fiscal year 2000 appropriations totaled more than the allotted budget. Subsequently, activities called for under the fiscal year 2000 appropriations are only funded at 50 percent. Therefore the actual funding provided for this effort is $625,000.

In fiscal year 2000, FHWA has provided technical and laboratory efforts in support of this project at an approximate cost of $200,000. Additional efforts by FHWA this fiscal year will cost approximately $200,000. It is FHWA's intent to establish a cooperative agreement with Clemson and SC State in support of the work plan being developed. It is estimated that this effort will cost between $175,000 to $225,000 in fiscal year 2000.

STRUCTURES RESEARCH

Question. For just the surface transportation R&D funds, please break down in extensive detail the funds requested for structures R, D and T and compare to fiscal year 1999 and fiscal year 2000 expenditures.

Answer. The information follows:

	Fiscal years—		
	2001	2000	1999
Bridge Inspection	$2,200,000	$2,101,000	$2,606,000
Bridge Management	400,000	401,000	665,000
Nondestructive Evaluation	1,800,000	1,700,000	1,941,000
High Performance Materials	5,000,000	5,380,000	4,820,000
Concrete	500,000	500,000	700,000
Steel	700,000	.....	1,920,000
Fiber Reinforced Polymers	3,800,000	4,880,000	2,200,000
Engineering Applications	7,060,000	6,204,000	8,166,000
Design Technology	2,060,000	1,630,000	3,050,000
Natural Hazard Reduction	3,000,000	2,613,000	3,474,000
Geotechnical/Foundations	1,000,000	870,000	900,000
Corrosion Protection	1,000,000	1,091,000	742,000

RESEARCH AREA FUNDING

Question. Please break out in extensive detail the projects or research areas and associated amounts requested under bridge inspection, high performance materials, and engineering applications.

Answer. The funding, research areas, and projects requested for fiscal year 2001 are as follows:

	Fiscal year 2001
Research Area:	
Bridge Inspection	$2,200,000
Bridge Management Projects	400,000
Nondestructive Evaluation Projects	1,800,000
High Performance Materials	5,000,000
Concrete Projects	500,000
Steel Projects	700,000
Fiber Reinforced Polymer Projects	3,800,000
Engineering Applications	7,060,000
Design Technology Projects	2,060,000
Natural Hazard Reduction Projects	3,000,000
Geotechnical/Foundation Projects	1,000,000
Corrosion Protection Projects	1,000,000

Question. Compare the fiscal year 2001 request with the fiscal year 2000 spending plan and demonstrate program continuity in each of these areas.

Answer. Requested fiscal year 2001 research areas and projects within each research area are the same as for fiscal year 2000, as indicated in the table below. In addition to comparing research area and project titles between fiscal year 2001 and fiscal year 2000, program continuity is demonstrated by the fact that the fiscal year 2001 budget request and actual fiscal year 2000 expenditures are based solely on the Federal Highway Administration's (FHWA) Structures Strategic Plan for Research, Development and Technology (RD&T). Currently the FHWA Structures Strategic RD&T Plan is being coordinated with the joint Transportation Research Board/American Association of State Highway and Transportation Officials (TRB/AASHTO) Strategic Plan for Bridge Engineering Research. These plans will be merged into the broader National R&T Partnership Initiative, which is being facilitated by the TRB.

	Fiscal years—	
	2001	2000
Bridge Inspection	$2,2000,000	$2,101,000
Bridge Management	400,000	401,000

	Fiscal years—	
	2001	2000
Nondestructive Evaluation	1,800,000	1,700,000
High Performance Materials	5,000,000	5,380,000
Concrete	500,000	500,000
Steel	700,000	.....
Fiber Reinforced Polymers	3,800,000	4,880,000
Engineering Applications	7,060,000	6,204,000
Design Technology	2,060,000	1,630,000
Natural Hazards Reduction	3,000,000	2,613,000
Geotechnical/Foundations	1,000,000	870,000
Corrosion Protection	1,000,000	1,091,000

RESEARCH OPPORTUNITIES

Question. What has been done in response to the fiscal year 1999 conference committee's encouragement to make use of unique research opportunities while major interstate reconstruction is underway? How much will be allocated for this activity in fiscal year 2000 and 2001.

Answer. In cooperation with the Utah Transportation Center, the Utah Department of Transportation, Utah State University, the University of Utah, and Brigham Young University, the Federal Highway Administration provided $883,000 in fiscal year 1999 to fund 10 studies related to: Fiber reinforced polymers; Earthquake resistant design and retrofit; Curved bridge design; Foundation design; Nondestructive evaluation technology; and Corrosion protection.

The Federal Highway Administration in cooperation with the same group identified above is providing $750,000 in fiscal year 2000 funding to fund a half dozen studies in similar areas. The Federal Highway Administration is not planning on fiscal year 2001 funding to the group because the inventory of original structures on the I–15 project will have been removed and replaced with new construction.

ADVANCED COMPOSITE MATERIALS

Question. What has been done in response to the fiscal year 1999 conference committee's encouragement to explore new technologies in advanced composite materials and to support research into high performance materials, bridge systems, coatings, and non-destructive evaluations? How much will be allocated for those activities in fiscal year 2000 and 2001?

Answer. At the encouragement of the conference committee, fiscal year 1999 funds were used to advance technology in: Fiber reinforced polymer (FRP) bonded repair methods at the University of Missouri; Use of carbon ribbon rods to rehabilitate steel bridges at San Diego State University; Advanced wood composites at the University of Maine; Acceptance test specifications for FRP used in highway bridge applications at West Virginia University; FRP bridge deck development at the Georgia Institute of Technology; Accelerated test methods for FRP evaluation at the University of Wisconsin at Madison; High performance bridge systems at Lehigh University; nondestructive evaluations with Wiss Janey Elstner Associates; and Cost of bridge corrosion with the National Association of Corrosion Engineers. Fiscal year 2000 expenditures in the areas identified above total $8.1 million. Planned fiscal year 2001 expenditure in the areas will total $7.8 million.

MINIMUM PAVEMENT MARKING LUMINANCE

Question. Is it correct that there are no consensus standards for minimum pavement marking luminance? If so, what is FHWA doing about this issue?

Answer. To date there are no standards on minimum retroflectivity values. Guidelines are being developed by the FHWA with input from state and local highway agencies and the general public through the Federal Register rulemaking process. When the FHWA completes the rulemaking process the guidelines (minimum retroflectivity values) will be included in the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD is applicable to all roads, streets and highways in the United States.

HIGHWAY CONSTRUCTION TIMES

Question. How does your fiscal year 2001 request respond to the recommendations and conclusions of the TRB report entitled "Dramatically Reducing Highway Construction Project Times: Suggestions for Research?" What has FHWA done to implement the recommendations of this TRB report? What work is being conducted in fiscal year 2000? What could be done in fiscal year 2001 with contract funds authorized in TEA–21?

Answer. To implement the recommendations of this report, the following activities have been initiated:

In fiscal year 2000, FHWA developed a Work Zone Best Practices Guidebook in partnership with the American Association of State Highway Officials (AASHTO). The guidebook presents a collection of highway community best practices, as submitted from across the Nation, which focus on minimizing driver and worker exposure in construction and maintenance work zones. With this guidebook a process is established to update and maintain an initial set of best practices, allowing the continued sharing of highway agency success stories with practitioners across the Nation. Regional seminars, which present the information in the guidebook and encourage additional sharing of best practices are now being planned. To supplement this guidebook, a checklist is under development that will facilitate identification and correlation of practices, appropriate for each stage of the project planning, design, and implementation processes. This activity speaks directly to the recommendations in the TRB report. In fiscal year 2001, advancement and exposure of this activity will directly influence highway operations and improved mobility and safety through work zones. Budget: fiscal year 2000—$150,000; fiscal year 2001—$75,000

In fiscal year 2000, FHWA initiated development of user-friendly computer software tools which accurately analyze and reliably predict work zone impacts. The decision making tools which are now under development will allow practitioners involved in the project preplanning, planning, development, and construction phases to weigh alternate strategies to mitigate the mobility and safety impacts resulting from work zones. Development of the first spreadsheet tool, which we are calling "Quickzone," is underway with field beta testing to be accomplished this summer, and full release planned for April 2001. In parallel with development of the decision making tool, FHWA will investigate work zone delay measurement practices and techniques, and attempt to quantify current national impacts, and develop guidelines for quantifying delays. In addition, FHWA will initiate a research project aimed at defining and describing highway construction processes, and identifying potential changes which could lead to significant reductions in highway construction project durations. Improvements to existing methods and procedures will be identified, providing a basis for future research into innovative technologies, materials, and methods to achieve revolutionary changes in the highway construction industry. In fiscal year 2001, the development of traffic impact analysis, support decision-making, tools will be accelerated and broadened. Budget: fiscal year 2000—$865,000; fiscal year 2001—$825,000

TRANSMIS CONTRACT AND PLANNING RESEARCH

Question. Please break out in extensive detail how the TRANSIMS contract funds and the planning research funds were or will be used during fiscal year 2000 and fiscal year 2001.

Answer. The following activities have been funded or will be funded with fiscal year 2000 and fiscal year 2001 contract funds. No funds other than contract funds have been allocated to TRANSIMS in fiscal year 2000 and fiscal year 2001.

—Completion of the TRANSIMS technical specifications, completion of computer code and field testing of TRANSIMS in Portland. TRANSIMS technical specifications have been completed and computer code developed.

—Development of a commercial, user-friendly version of TRANSIMS. A Request for Proposals (RFP) has been issued for the development of a commercial version of TRANSIMS. Proposals have been received and we are now in the contract negotiation process. An award is expected in May of 2000 and funding for the commercial version will commence after the award.

—Support Metropolitan Planning Organizations which are first to implement TRANSIMS. Financial and technical support will be provided to the first Metropolitan Planning Organizations (MPO) to implement TRANSIMS. MPOs will be selected so as to include a diversity of sizes, demographic characteristics and issues to be addressed. The objective of this support is to demonstrate TRANSIMS' applicability in a wide variety of areas and situations.

—TRANSIMS Outreach. This includes development of training materials, publications and disseminating technical information on TRANSIMS capabilities. Three types of training materials will be developed; an introductory overview on TRANSIMS for managers and MPO officials, an introduction to TRANSIMS technical methodology for MPO technical staff, and a University level course on TRANSIMS theory. The University course is essential to providing training to students who will eventually become MPO staff. Publications will include descriptions of TRANSIMS suitable for distribution to a wide variety of audiences including MPO staff, elected officials, technical experts and Universities. Information dissemination will include conferences, presentations, technical support and use of a Website.

BREAKDOWN OF EXPENDITURES

[Dollars in thousands]

	Fiscal years—	
	2000	2001
Completion and Testing	$2,400	$1,300
Commercialization	3,000	2,000
Support to Metropolitan	.....	500
Planning Organizations Outreach	275	633

Note: The amount stated for commercialization is an estimate. The specific amount will be determined during the contract negotiation process.

Question. How much money was allocated to TRANSIMS during fiscal year 1998, fiscal year 1999, and fiscal year 2000 and how much is planned for fiscal year 2001? Furthermore, indicate by year the amounts of cost sharing received from other federal agencies for this project. Please break out in detail the specific activities funded with those monies.

Answer.

TRANSIMS FUNDING—FISCAL YEAR 1998 TO FISCAL YEAR 2001

[Dollars in thousands]

	Fiscal years—			
	1998	1999	2000	2001
Completion of Technical Specifications	$6,411	$2,700	$2,400	$1,300
Commercialization	.....	.....	3,000	2,000
Support for MPOs	.....	.....	.....	500
Outreach	.....	300	275	633
Total	6,411	3,000	5,675	4,433

These activities are described in the previous question.

The table below describes TRANSIMS funding from sources other than FHWA for fiscal years 1995 through the present:

	Fiscal years—			
	1995	1996	1997	1998
FTA	$500	$500	.....	.....
EPA	250	525	$275	$128

FTA funds in the past have supported general TRANSIMS development and ensured that transit issues are adequately addressed.

EPA funds have provided support for the development of the emissions module and supported the coordination of TRANSIMS with other emissions research. For the emissions module, these funds have provided data from the University of California on the relationship of the vehicle operating mode (speed, acceleration, tem-

perature) and modal emissions, and data from the University of West Virginia on medium and heavy duty truck operating characteristics. Along with data gathering, the funds have been directed to examining the interface between the traffic microsimulation module and the emissions module and technical support on the emissions module. EPA has supported the development of TRANSIMS capability to simulate the emissions reduction from the use of modes other than the single occupant vehicle, including transit, ride sharing, bicycle and pedestrian modes. EPA has funded the coordination of TRANSIMS with other EPA research efforts and have the LANL staff participation in EPA conferences on emissions research.

SUSTAINABILITY RESEARCH

Question. Were any funds provided from any surface transportation subaccount for research into sustainability.

Answer. No.

REAL ESTATE SERVICES

Question. The real estate services section of the FHWA justification states: "Video tapes and CDROMs will be produced on the critical topics of business relocation, and residential dwelling comparability." How is this a research and development activity? Why isn't this request funded under LGOE?

Answer. This is largely a research and development activity because the substance for these products must be thoroughly researched and developed into usable best practices. Costs are almost entirely for the research itself and in small part for the tapes and CDs to provide the results to state and local officials.

INPUT FOR PLANNING RESEARCH PROGRAM

Question. Please discuss the scope and nature of input from MPOs and various states and local governments that FHWA receives in shaping the planning research program.

Answer. FHWA gets customer input, including input from MPOs, states and local governments, on planning research needs through a series of formal and informal methods. Informal input at the program and project level is received through staff's active participation in conferences, committees, workshops and other professional activities. In addition, FHWA sponsors a regular conference through TRB "Transportation Planning Needs and Requirements of Small and Medium Sized Communities."

Formal input is received through four mechanisms. First, FHWA holds an open forum on planning research immediately preceding the annual Transportation Research Board meeting to review the current program and discuss future needs. Secondly, FHWA works annually with the National Cooperative Highway Research Program to refine and implement the recommendations from the TRB conference on, "Refocusing Planning for the 21st Century: Transportation Technical Planning Research". In addition, FHWA sponsors scanning activities in several of the Priority Areas that provide significant input to the research program. Finally , FHWA is also receiving additional input on planning research from the STECRP.

EFFECTIVENESS OF PLANNING RESEARCH PROGRAM

Question. How do you evaluate the effectiveness of your planning research program? What does your most recent assessment tell you?

Answer. Feedback from intended users, typically through case studies, provides the primary means of evaluation for projects and priority areas. Scanning activities in priority areas is another evaluation mechanism that is increasingly used within the Planning Research Program.

An implicit measure of effectiveness of the overall program is partnership opportunities, both within DOT and externally. FHWA recognizes the value in partnerships and has worked to build consensus on the planning research agenda by sponsoring conferences and workshops to define critical areas and refine research issues. One example is in the area of incorporation of safety issues into the planning process. Safety has been defined by MPO's, states, local government as an area needing research. In addition, safety is the highest priority for FHWA. We have allocated funds to define the issues and develop an action plan in cooperation with TRB, NHTSA, FMCSA and others in fiscal year 2000. The Travel Model Improvement Program is another example of how FHWA is using partnerships to advance the Planning Research Agenda.

Feedback FHWA has received to date indicates a continuing need for training and technology transfer activities particularly addressing new planning issues and edu-

cating new planning staff. Areas of customer concern include equity analysis, planning for and implementing ITS.

PLANNING RESEARCH PROGRAM

Question. Please break out on a project-by-project basis how the $3.924 million proposed for planning research would be used.

Answer. For fiscal year 2001, the Planning Research Program used the following priority areas:

Fiscal Year 2001 Priority Areas

Intermodal Transportation Planning	$500,000
System Management & Operations	500,000
Transportation & Land Use	840,000
Planning Processes & Decision-Making	840,000
Forecasting Transport Demand & System Change	840,000
Safety Integration	400,000
Total	3,920,000

FISCAL YEAR 2000 SPENDING PLAN

Question. Compare those expenditures to your fiscal year 2000 spending plan and discuss how program continuity is maintained.

Answer. For fiscal year 2000, the planning research program used the same priority areas as in fiscal year 2001 with the addition of a new category of Safety Integration in fiscal year 2001. The funds for Safety Integration will focus on the implementation of the recommendation of the action plan developed as part of the TRB workshop on, "Integration of Safety into the Planning Process".

Program continuity in fiscal year 2000 continues to be an issue due to earmarked projects and studies. For fiscal year 2000, priority areas to date are funded based on customer and stakeholder needs as well as amounts available after considering earmarks.

ENVIRONMENTAL RESEARCH

Question. Please break out on a project-by-project basis the expected use of the $6.196 million requested for environmental research and compare those allocations to the fiscal year 2000 spending plan to demonstrate program continuity.

Answer. Major issues in Air Quality and Climate include particulate matter (PM2.5) emissions rates from transportation sources; development of model to assess NO_X impacts of heavy-duty engines; and development and evaluation of transportation control measures. It is expected that they will be continued in fiscal year 2001. Approximately $1.0 million have been allocated or planned for these studies for fiscal year 2000. For fiscal year 2001, $1.702 million have been requested for research in Air Quality and Climate.

Under Wetlands, Water Quality and Ecosystems, fiscal year 2000 funds have been allocated to support research in changes in constituent loads of highway runoff created by changes in fuel composition and vehicle components; emissions impacts on water quality from atmospheric deposition; watershed and ecosystem-based management schemes; and vegetation management. For fiscal year 2001, $567,000 has been requested for Wetlands, Water Quality and Ecosystems.

Noise research focuses on reducing and managing the impacts of traffic noise on communities. Continued research is needed to validate and disseminate the latest Traffic Noise Model (TNM), and to incorporate technological advances in highway traffic noise analysis and abatement techniques. For fiscal year 2000, $290,000 have been allocated for Noise research. For fiscal year 2001, $474,000 has been requested for Noise research.

Global Climate Change research includes development and evaluation of strategies to reduce greenhouse gases, and the development of improved analytic techniques for tracking and quantifying them. Research in fiscal year 2001 will continue in these areas in addition to assessments of transportation sources of greenhouse gas emissions. For fiscal year 2001, $475,000 has been requested for Global Climate Change research.

Research in the Communities, Neighborhoods, and People area will develop tools, techniques and methodologies to identify and collect accurate data; and to analyze and reduce the direct, indirect and cumulative impacts of highways on communities, including social, economic, and quality of life effects. Research includes: performance indicators, context sensitive design, transportation enhancements. In fiscal year

2000, approximately $335,000 is budgeted for this research. For fiscal year 2001, approximately $560,000 has been requested.

The Environmental Justice focus area develops tools and techniques and disseminates information to assess, prevent, and address these potential discriminatory effects. In fiscal year 2000, approximately $600,000 is budgeted for this research. For fiscal year 2001, approximately $600,000 has been requested.

The objective of the Pedestrian/Bicyclist research effort is to provide planning methodologies for localities to use to decide whether investments in non-motorized projects will meet their community's needs. In fiscal year 2000, $80,000 in surface transportation research funds were budgeted for this effort. For fiscal year 2001, approximately $210,000 has been requested.

Research in Cultural and Historic resources develops data management techniques and predictive tools to assess the direct, indirect, and cumulative impacts of highway development, reconstruction, and maintenance on historic and cultural resources. In fiscal year 2000, $75,000 in surface transportation research funds were budgeted for this effort. For fiscal year 2001, approximately $167,000 has been requested.

The livability research initiative will conduct research, develop performance measures for livability, develop tools and methods and provide educational materials to inform the public of livability issues. It will also serve as a forum for research coordination among federal agencies. The livability research will build on the results and enhance FHWA's programs that support livable strategies including traffic calming, CMAQ, Transportation Enhancements, flexible design, and others. In fiscal year 2000, $80,000 in surface transportation research funds were budgeted for this effort. For fiscal year 2001, approximately $167,000 has been requested.

A number of research efforts related to environmental streamlining are being funded in fiscal year 2000 including: $250,000 to address the alternative dispute resolution provision in Section 1309 of TEA–21: $100,000 to develop a new Technical Advisory to provide guidance for the proposed joint FHWA–FTA regulations on NEPA and Transportation Decision-making; $100,000 for conducting informational interviews with Federal agencies, and non-federal entities, to explore the perspectives and attitudes of those directly involved in the project delivery and environmental review of transportation projects as they relate to environmental streamlining; $300,000 for the development of an environmental streamlining information clearinghouse web site and related electronic communication to support successful implementation of streamlining. For fiscal year 2001, approximately $1.27 million in STR funds has been requested to support environmental streamlining activities.

GUIDANCE UNDER SECTION 5107 OF TEA–21

Question. What advice and guidance has FHWA received from the advisory board that was set up pursuant to section 5107 of TEA–21? In your answer please specify for fiscal year 2000 and 2001 how much has been and will be spent on the advisory committee and associated outreach activities.

Answer. Pursuant to section 5107 of TEA–21, FHWA entered into a cooperative agreement with the National Academy of Science, Transportation Research Board (TRB) to establish the Surface Transportation-Environmental Cooperative Research Program (STECRP) Advisory Board.

The Advisory Board, a 17-member panel of experts from academia, the States, metropolitan planning organizations, industry and environmental organizations has been tasked to review, comment and recommend strategies for collaboration in research and technology transfer activities within the USDOT, and with other federal agencies and non-federal organizations. Periodic reports to the USDOT and to the Congress on their progress in developing a national agenda of surface transportation-environmental and planning research priorities, and the strategic direction of research conducted by the transportation community will be submitted by the Advisory Board in Fall 2000 and 2001.

The Advisory Board, in its initial phase of formulation, met in January and April of this year. As such, the Advisory Board has focused on conducting extensive outreach to gather information from the USDOT and its partners and stakeholders for meeting their goals, and is not yet prepared to provide advice and guidance to the FHWA on surface transportation research issues at this time.

The Advisory Board has required $300,000 for their activities through fiscal year 2000. The FHWA estimates needs of between $150,000 to $200,000 for the remaining activities envisioned by the Advisory Board for fiscal year 2001.

PARTICULATE MATTER RESEARCH

Question. Now that particulate matter research is underway by EPA, FHWA, and other organizations, how much time and effort is anticipated to obtain an understanding of PM–2.5 impacts on transportation regulation, and to develop effective analytical tools and mitigation strategies? How much is requested for this research in fiscal year 2001? How much is being allocated in fiscal year 2000?

Answer. FHWA anticipates that at least 3–4 years will be required to gain an adequate understanding of the PM–2.5 issues. PM is a complex pollutant that is both generated directly from engines and kicked up by road dust, but also is formed in the atmosphere from smaller particles.

The draft work plan for PM views the overall effort in stages. First, sources and the generation of PM pollution must be identified with particular emphasis on transportation sources. This is critical since the relationships between travel activity, emissions and concentrations must be understood in detail before they can be adequately modeled for conformity, NEPA and other purposes. This could take at least 1–2 years, and possibly more. Second, the long and painstaking process of model development must be accomplished, taking perhaps another 1–2 years. Finally, initial research into cost-effective mitigation strategies should occur which will likely be an ongoing process.

NRC ADVISORY COMMITTEE

Question. Did the NRC advisory committee review the scope and nature of this research?

Answer. The Advisory board established under TEA–21 met in January 2000 for the first time, and again in April 2000. At the first meeting, Board members were given some information relating to FHWA's PM research effort but have not yet had an opportunity to provide input into it. FHWA will soon be providing the Board with a draft of a Strategic Workplan for Particulate Matter Research. This Workplan, which is still underdevelopment, draws on the results of an extensive literature review and a one-day symposium with transportation and air quality experts from around the Country in January 2000.

TOOLS/MODELS TO EVALUATE BENEFITS/BURDENS

Question. What research are you pursuing to advance analytical tools or models to evaluate the distribution of benefits and burdens in transportation decision-making and investments and environmental justice-related cases? How much is requested for this research in fiscal year 2001? How much is being allocated in fiscal year 2000? Did the NRC advisory committee review the scope and nature of this research?

Answer. In fiscal year 2000, the FHWA allocated $600,000 towards the evaluation of environmental justice and Title VI; however, the fiscal year 2000 research allocations focused primarily on the technical transfer of existing tools and methods to identify benefits and burdens. The fiscal year 2000 the research effort will develop a brochure to provide basic background information, a set of case studies and effective practices on state of the practice for applying environmental justice in the planning, project development, and right-of-way decision making processes, and a website where a wide array of resources, including the current fiscal year 2000 research will be available. The final product of the fiscal year 2000 research will be a workshop that will include case studies and effective practices of using benefits and burdens analysis in transportation decision-making.

To evaluate the distribution of benefits and burdens FHWA is also pursuing the application of existing tools such as Community Impact Assessment for evaluating the distribution of transportation benefit and burdens. FHWA is also developing a One-Day Workshop which will be composed of different modules including data sources and methods, community impact techniques, and effective public involvement.

In fiscal year 2001, the FHWA requested $600,000 for research in the environmental justice and Title VI focus area. Anticipated products would include improving existing analytic tools and models as well as investigating new methodologies for assessing transportation impacts on low-income and minority populations. The NRC advisory committee did not review the scope and nature of our research.

UNDERSERVED COMMUNITIES

Question. What would improve the effectiveness of state and local transportation agencies in involving and engaging traditionally underserved communities? What would be the associated monetary costs?

Answer. State and local transportation agencies should develop public involvement strategies that specifically target traditionally underserved communities. These strategies should be developed using members of the community to provide input and suggestions for to help gauge the effectiveness. State and local transportation agencies are encouraged to improve research and data collection methods relating to transportation needs of the traditionally underserved. Utilizing, as appropriate, Historically Black Colleges and Universities (HBCU), Minority Institutions (MI), Hispanic Serving Colleges and Universities (HSCU), and Indian Centers to network and form community links is yet another method to involve and engage under-served communities.

If a state or local transportation agency is unsure about how to improve the effectiveness of engaging traditionally underserved communities, there are several resources that are available from FHWA. "Public Involvement Techniques for Transportation Decision-making" offers several specific techniques to engage the traditionally under-served. FHWA also provides methods and tools to enable State and local transportation agencies to more effectively involve and engage traditionally underserved communities through Title VI training for State and local transportation agencies and through public involvement training. FHWA also provides public involvement methods and tools which are a fundamental component of all program operations, planning activities, and transportation decision-making. Through research and technical transfer, FHWA can provide state of the art techniques for meaningful public involvement using non-traditional techniques.

The community impact assessment is a method to effectively involve and engage traditionally under-served communities. The community impact assessment is a process to evaluate the effects of transportation action on a community and its quality of life. State and local transportation agencies can also participate in transportation enhancements (TE) activities to help foster the quality of life in communities. TE benefits the communities by preserving the natural and human environment and strengthening the public role in local and state transportation planning.

It is difficult to develop monetary costs because the need to improve the effectiveness will vary from location to location.

POLICY RESEARCH

Question. Please update your answer from last year regarding the major components in the road map for policy research developed by FHWA by indicating progress made in each areas since last year. How does the fiscal year 2001 budget request help implement that road map?

Answer. Consistent with the restructuring of the FHWA, our research is now targeted toward achieving the goals of our strategic plan. The major components in the policy research agenda retain travel monitoring, highway investment/performance analysis, personal travel surveys, innovative financing and pricing strategies, highway cost allocation/truck size and weight studies, and improving economic productivity. Each of these areas is being advanced this year and the fiscal year 2001 budget is aimed at making further progress in our capabilities in these areas. Examples include:

Work is moving forward on the periodic National Personal Travel Survey (NPTS). During fiscal year 2000, the planning phase continues and the NPTS/ATS pretest is being fielded during February-May 2000. Development of the full survey is focusing on the need to provide travel data that will support both traditional travel demand forecasting and TRANSIMS. Further, the inclusion of an enriched long-trip data set will significantly enhance the ability to support statewide planning. Conducting the full survey is the primary activity planned for fiscal year 2001. The full 14-month coordinated NPTS/ATS will begin during October 2000 and will be completed in December 2001.

Enhanced capabilities are being incorporated into the highway investment/performance models used to predict capital investment requirements. These enhancements include an improved pavement deterioration model, improved emissions model to be consistent with the latest EPA product, increased accuracy in the benefit/cost analysis procedures, and development of a bridge investment/performance model that incorporates economic as well as engineering criteria. We are working toward use of the HERS model by States.

Research is underway to update data on travel characteristics by different vehicle configurations and to improve analytical tools used to assess pavement and bridge costs associated with operations of different vehicle classes based on recent research by others. Work is underway to complete tools for State highway cost allocation studies and technical assistance to a number of States in the use of those tools. New data on truck commodity flows have become available that will significantly improve

our ability to estimate changes in truck configuration and usage that may be expected. Improved analytical tools will provide FHWA and the States a much more complete picture of current truck utilization patterns and how those patterns would change under different policy options.

Research for the Value Pricing Pilot Program will provide improved technical support which in turn will aid outreach to increase interest and participation in the program. Research is underway to find better ways of developing pricing strategies, carrying out feasibility studies, and evaluation of pilot projects. Assessment includes the ability of the Pilot Program to achieve program goals relating to congestion relief, transit ridership, and air quality, as well as the financial effects on low-income drivers.

Work is under way to add to the picture of economic benefits of highway investment to the consumer sector and the business and industry sectors of the economy. A consolidation and integration of these aspects of highway transportation will lead to a better understanding of the extent to which highways contribute to the national economy.

Preparation of a new Travel Monitoring Guide is underway to aid the States in tracking travel trends. The guide is now undergoing a review process and is expected to be published in 2001.

CHALLENGES IN POLICY RESEARCH

Question. What is the most pressing challenge in research that needs additional attention during fiscal year 2001?

Answer. The most pressing challenge in research is to provide timely answers to decision makers and to anticipate their needs for resolution to research questions. Information on economics, demographics, highway travel and spending trends is combined to provide an understanding of the interrelationships between highway programs, systems, and services. This understanding forms the basis of the ability to assess the highway systems as a component of the overall transportation system. This knowledge is further used to identify issues, evaluate the effectiveness of current programs and policies, and to evaluate alternative programs and policies. Research contributes to these abilities through:

—systematic activities to anticipate future analytical needs.
—management of data systems, i.e., design, collection, assessment, presentation, and distribution of data and information.
—development of sophisticated tools for distilling underlying trends and relationships.
—design and testing of techniques to quantify relationships as a means to balance competing or complimentary goals.
—incorporation of analytical capabilities into programs to measure impacts and inform future program decisions.

STUDIES ON TRUCK SIZE AND WEIGHT

Question. How much of the policy research budget request will be allocated towards studies regarding truck size and weight?

Answer. Approximately $450,000 from the policy research budget will be allocated for studies relating to truck size and weight issues. While essential for truck size and weight policy analysis, the data and analytical tools developed in this research will also be used for other freight-related studies conducted in cooperation with the Office of Freight Management and Operations. It is anticipated that data and analytical tools developed for Federal program and policy analysis will also be made available to the states for their own analyses. Data and analytical tools also are applicable to studies that estimate relationships between highway investment and overall business logistics costs.

STUDIES ON HIGHWAY COST ALLOCATION

Question. How much of the policy research budget request will be allocated towards studies regarding highway cost allocations?

Answer. Approximately $475,000 from the policy research budget will be allocated for studies related to highway cost allocation. This research will feed directly into an update of the Federal highway cost allocation study that will be completed before surface transportation reauthorization. As with the truck size and weight research, data and tools that are essential for analyzing the extent to which user fees paid by various types of vehicles correspond to the pavement, bridge, and other infrastructure costs those vehicles create are also used for other program and policy studies. For instance, data and analytical tools developed to estimate user fees paid by different vehicle classes are also used to estimate future revenues to the High-

way Trust Fund impacts of various potential strategies to meet energy and environmental objectives, and potential alternatives to the fuel tax that are beginning to be discussed in the transportation community. Work to estimate costs of highway-related air pollution, motor-vehicle crashes, and other costs of motor vehicle use is conducted in coordination with other offices within and outside FHWA.

NATIONAL PERSONAL TRANSPORTATION SURVEY

Question. If none of the funds requested for the NPTS are approved under LGOE, how will work on this project proceed?

Answer. Unless funding can be obtained from other governmental sources, it will not proceed. This includes the completion of the actual survey and may impact the "add-on" samples requested by various States, local governments and Metropolitan Planning Organizations (MPOs). At this time, approximately 20 states and MPOs have indicated that they are considering the purchase of "add-on" samples for their jurisdictions. This increased interest in "add-on" samples reflects an increased awareness of the utility of the data set as a tool for Statewide and metropolitan planning.

Question. What is to be the minimum amount needed to conduct National Personal Transportation Survey activities during fiscal year 2001?

Answer. The $4,750,000 requested for fiscal year 2001 is for conducting the data collection (not planning) for the coordinated 2000 NPTS/ATS. This is the minimum amount needed to continue work in fiscal year 2001, largely because we are making up for the lack of funds allocated to NPTS is fiscal year 2000. To assure that a complete picture of household travel is developed, the collection of daily travel through the NPTS is being closely coordinated with the contemporaneous data gathering of long trip data as part of the 2000 American Travel Survey (ATS) conducted by the Bureau of Transportation Statistics.

Question. How much is to be spent on this work in fiscal year 2000?

Answer. There were no funds specifically identified for NPTS in the fiscal year 2000 Appropriations Act. However, the Bureau of Transportation Statistics (BTS), our partner in the coordinated NPTS/ATS effort, provided a very significant share of the fiscal year 2000 funding for the pretest activity. In addition, FHWA was able to carve out some funding for NPTS from our general research funds.

Question. Is it likely that BTS or FTA will contribute funds towards this project?

Answer. The NPTS has historically been sponsored by several DOT agencies. In fiscal year 1999 and fiscal year 2000, BTS provided approximately $1.5 million and NHTSA has provided $200,000. FTA did not provide any funding in fiscal year 2000, but currently has a request for NPTS funding before the Committee at a minimum of $500,000 for fiscal year 2001.

INTERNATIONAL ACTIVITIES AND RESEARCH

Question. Please specify the number of planned and completed international scanning trips taken during each of the last three years. Please specify the total cost of those trips for each year and the benefits derived from each trip. How do you assess the benefits of each trip?

Answer. The FHWA completed four reviews in fiscal year 1998 at a cost of approximately $450,000. The FHWA's cost for five fiscal year 1999 reviews was $520,000. Fiscal year 2000 was the formal start of the Joint AASHTO/FHWA International Scanning Program. This program is jointly managed and funded by AASHTO and the FHWA, and will thus reduce the overall cost of this program for FHWA. AASHTO participation ensures that scans serve the priority needs of the State DOT's for improved technology and practices. There are 6 reviews planned for fiscal year 2000. The FHWA's share will be an estimated cost of $370,000.

Scanning benefits are assessed by scan team members and their U.S. colleagues. Benefits appear in many forms and typically are realized incrementally over the years after a scan takes place. Listed below are some major results and emerging benefits of scans taken in fiscal year 1998 and 1999. Similar information for fiscal year 2000 scans is not yet available.

Fiscal Year 1998 Scans:

Innovative and Emerging Traffic Controls for Congestion and Safety

The following devices and practices have been recommended for further study with a view to possible adoption in the U.S.: (1) variable speed limits with photo enforcement for freeway management; (2) all-white pavement marking systems; (3) freeway queue detection and back-of-queue warning to prevent rear-end collisions; (4) freeway lane control signals to indicate downstream lane status; (5) special markings to ease merging and diverging conflicts at multi-lane freeway ramps; (6)

detection and control logic to reduce rear-end collisions at high-speed signalized intersections; (7) area display of real-time parking availability and travel information to reduce travel and improve customer service; (8) pictograms and symbols for dynamic message signs; (9) use of symbols to indicate travel on freeway diversion routes; (10) a strategic goal to eliminate fatalities on highways; and (11) a stronger emphasis on the safety impacts of operational improvements.

Projects/studies being undertaken as a result of the scan include: (1) National Cooperative Highway Research Project (NCHRP) Project 4–28, Feasibility Study for an All-White Pavement Marking System and (2) NCHRP Project 3–59 Variable Speed Limit Implementation.

Motor Carrier Safety Technologies

Based on key findings, scan team recommendations include: (1) create a greater safety focus for third-party organizations; (2) collect crash data to establish crash causes; (3) consider standards in the development of passive safety systems (cab crash worthiness) and active safety systems (electronic interface); (4) use truck-only lanes; (5) develop a comprehensive, standardized driver education curriculum; (6) establish performance-based driver assessment; (7) encourage public and private organizations for advancing driver and motor carrier coordination; (8) develop a more systematic and scientific approach to manage commercial vehicle driver performance; and (9) promote an expanded focus on in-company inspections.

Geotechnology—Canada and Europe

Results of the scan have been directly integrated into: (1) NCHRP Synthesis 276 Geotechnical-Related Development and Implementation of Load and Resistance Factor Design (LRFD) Methods; (2) two NCHRP research studies related to updating and modifying the current AASHTO LRFD code for retaining walls and structural foundations; and (3) the National Highway Institute Course on Load and Resistance Factor Design for Highway Bridge Substructures—a course that has been presented at over 30 locations since July 1998.

As a result of the scan, the FHWA now represents the United States on an international committee to implement LRFD methods in geotechnical practice worldwide.

Winter Road Maintenance Practices II

Several states are experimenting with advanced European snow plows that efficiently clear snow and ice while doing less damage to road surfaces. The U.S. is embarking on wider use of road weather information systems, similar to those used in Europe, that are highly integrated into traffic management centers and intelligent transportation systems.

The scan verified that the U.S. has made good progress in recent years in acquiring and applying international advanced snow and ice control technologies.

Fiscal Year 1999 Scans

Bridge Scour Countermeasures.—A major scan team finding is that European practice uses riprap as a permanent solution for scour while in the U.S., riprap is generally considered a temporary measure. As a result of the scan, the design and installation techniques for riprap and scour prediction manuals are being re-evaluated.

Also, a National Highway Institute stream stability and scour course was developed in conjunction with the Wallingford Laboratory in the UK and with participation from Switzerland, Germany, and the Netherlands.

Steel Bridge Fabrication and Erection Technology.—Findings from the scan are being considered by the steel bridge fabrication community. Improvements in six areas are being considered for future implementation: integrated computer-aided design (CAD) and computer-aided manufacturing (CAM) software; automated recording; high performance steels and coatings; cutting and joining; certification and contracting; and design innovation.

A U.S. steel producer has begun testing weathering steel materials in cooperation with a Japanese fabricator.

Methods and Procedures to Reduce Motorist Delay in Construction Zones.—The scan identified several methods for potential applicability in the U.S. The scan team recommendations include the following: (1) shorten the contract time by using lane-rental concepts more frequently; (2) improve communications with motorists by using advanced and real-time information ITS technologies; (3) adopt a coordinated policy, planning, and programming approach to work zone planning and operations; (4) reduce lane widths; (5) design for future maintenance; (6) evaluate the use of yellow markings in work zones; (7) use highly visible traffic control devices and equipment to warn motorist of, and guide them through, work zones; and (8) implement quality control/quality assurance programs for traffic and worker safety.

Recycled/Secondary Materials.—Much was learned about the use in Europe of recycled materials in highway projects and how materials reuse contributes to the sustainability of transportation systems. As follow-up to the scan, a national workshop on "Applying Sustainability Principles to Materials Use in the Highway Environment" will be held this year. The workshop will highlight recycling practices reviewed on the scan, bring together key leaders from public agencies involved in devising recycling solutions, and demonstrate recycling projects.

European Practices for Sustainable Development.—The scan identified several broad measures to consider for possible implementation in the U.S. These include: (1) an emphasis on policy consistency and cooperative problem solving as a way to resolve transportation-environmental conflicts and speed attainment of environmental goals; (2) matching operating responsibility for transit and highway systems with control over funding for those systems; (3) strategic planning for both the long term and mid-term; and (4) use of performance standards along with monitoring and reporting on progress. More specific measures for potential applicability to the United States include: car sharing and other eco-driving projects, and joint development to help pay for expensive but socially and environmentally attractive project designs.

Durability of Concrete Segmental Bridges.—The scan found that segmental and cable-stayed bridge technology and developments in Europe and the U.S. are converging. One major difference, however, is that Europe relies heavily on waterproofing membranes and overlays to protect bridge decks from corrosion caused by de-icing salts. Improved grouting procedures to avoid corrosion were also found in Europe. The scan has set the stage for further exchanges of knowledge between the U.S. and Europe in these areas.

Fiscal Year 2000 Scans

Right-of-Way and Utilities Best Practices.—This scan has just been complete; benefit assessment is not yet available.

New Road Lighting Technologies and Practices.—This scan has just been completed; benefit assessment is not yet available.

TECHNICAL ASSISTANCE TO VARIOUS AFRICAN STATES

Question. Please assess the costs and benefits of the FHWA investment in providing technical assistance to various African states, and the Pan American Institute of Highways. Please estimate fiscal year 1999, fiscal year 2000, and requested fiscal year 2001 funds allocated or planned for that activity and provide the funding source of those monies.

Answer. Funding for the FHWA's sub-Saharan African countries:

Fiscal year	Amount	Source
1999	$65,000	International Outreach Program Funds.
2000	[1] 200,000	International Outreach Program Funds.
2001	[1] 275,000	International Outreach Program Funds.

[1] Planned.

The target countries in Africa receive information concerning U.S. transportation technology and practices which enables them to more effectively construct and manage their transportation systems, thus supporting the U.S. foreign policy of encouraging economic development and democratization of developing countries and countries in transition.

Our focus on establishing technology transfer centers in target countries aims at fostering a long-term commitment to technology transfer though institutionalization of the process. Institutionalization supports on-going improvement processes in the road sector. We also aim to encourage synergies among the centers by linking centers in the different world regions into a global network. The technology transfers we support indirectly promote the exports of U.S. highway related firms since the countries involved in technical exchange and assistance activities tend to develop a preference for U.S. standards and equipment.

Funding for the FHWA's Pan American Institute of Highways:

Fiscal year	Amount	Source
1999	$220,000	GOE funds for PIH contract staff. Program funding from International Programs.

Fiscal year	Amount	Source
2000	[1] 220,000	GOE funds for PIH contract staff. Program funding from International Programs.
2001	220,000	GOE funds for PIH contract staff. Program funding from International Programs.

[1] Planned.

The FHWA's investment in the PIH directly supports the U.S. foreign policy of encouraging economic development and democratization in Latin America. By participating in the PIH Network, Latin American countries and their technology transfer centers receive information about U.S. transportation technology and practices which enable them to more effectively construct, manage, and maintain their transportation systems. The PIH Technology Transfer Centers are a cost-effective mechanism for providing technical assistance to a country through its own local organizations. The FHWA also leverages the annual dues paid by the centers by providing consolidated services through the PIH Headquarters to the overall network.

The FHWA's investment benefits the U.S. private sector by providing a ready conduit for introducing U.S. highway-related products and services to markets in the Americas. The PIH Centers are able to provide information on possible solutions to selected transportation problems as well as suitable U.S. products and services. In 1997, a Latin American PIH Center workshop on winter de-icing technologies resulted in the sale of U.S. de-icing technology. The PIH also allows FHWA to stay abreast of investment opportunities made possible by the numerous privatization and concession programs being successfully implemented in the Americas. Other benefits include:

—Increased exposure to U.S. highway related products and services through increased participation in U.S. Trade Shows and exhibitions.
—Increased exposure to U.S. state-of-the-art and-practice engineering techniques through training and distribution of technical material.
—Increased exposure of U.S. companies to Latin American markets through participation in PIH seminars and conferences.
—Increased partnership with the World Bank, Inter-American Development Bank, and other developmental organizations.
—Increased exposure to U.S. technical materials, such as SUPERPAVE, Long Term Pavement Performance Studies.
—Training provided through over 40 highway maintenance seminars during the past 8 years in 17 countries for more than 7,000 participants.
—Preparation for, and limited assistance with, natural disasters.

TECHNICAL ASSISTANCE TO THE PAN AMERICAN INSTITUTE OF HIGHWAYS

Question. Please assess the costs and benefits of the FHWA investment in providing technical assistance to the Pan American Institute of Highway. Please estimate fiscal year 1999, fiscal year 2000, and requested fiscal year 2001 funds allocated or planned for that activity and provide the funding source of those monies.

Answer. Funding for the FHWA's sub-Saharan African countries:

Fiscal year	Amount	Source
1999	$65,000	International Outreach Program Funds.
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[1] Planned.

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Our focus on establishing technology transfer centers in target countries aims at fostering a long-term commitment to technology transfer though institutionalization of the process. Institutionalization supports on-going improvement processes in the road sector. We also aim to encourage synergies among the centers by linking centers in the different world regions into a global network. The technology transfers we support indirectly promote the exports of U.S. highway related firms since the

countries involved in technical exchange and assistance activities tend to develop a preference for U.S. standards and equipment.

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The FHWA's investment benefits the U.S. private sector by providing a ready conduit for introducing U.S. highway-related products and services to markets in the Americas. The PIH Centers are able to provide information on possible solutions to selected transportation problems as well as suitable U.S. products and services. In 1997, a Latin American PIH Center workshop on winter de-icing technologies resulted in the sale of U.S. de-icing technology. The PIH also allows FHWA to stay abreast of investment opportunities made possible by the numerous privatization and concession programs being successfully implemented in the Americas. Other benefits include:

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—Increased exposure of U.S. companies to Latin American markets through participation in PIH seminars and conferences.
—Increased partnership with the World Bank, Inter-American Development Bank, and other developmental organizations.
—Increased exposure to U.S. technical materials, such as SUPERPAVE, Long Term Pavement Performance Studies.
—Training provided through over 40 highway maintenance seminars during the past 8 years in 17 countries for more than 7,000 participants.
—Preparation for, and limited assistance with, natural disasters.

INTERNATIONAL ACTIVITIES

Question. Please discuss how FHWA is leveraging its funds for international activities with those of other countries. Are you promoting networks of technology transfer centers?

Answer. The FHWA is actively working to leverage its investment by cost-sharing with other U.S. Government agencies and international organizations. At the FHWA's urging, the World Road Association (PIARC) reviewed the concept of technology transfer centers and recognized their value in exchanging and transferring technology. Through its C–3 Technological Exchanges and Development Committee, PIARC is now annually providing four to five developing countries with $10,000 each to establish technology transfer centers. The FHWA is working to obtain funding through USAID for two highway technology transfer projects in the Southern Africa Development Community (SADC) region of Africa. Additionally, the FHWA provided extensive training in the U.S. for 56 officials from the Turkish Directorate of Highways which was funded by a World Bank loan. This project has been expanded to include assistance in the development of a highway information system in Turkey which will also be funded through the World Bank. The FHWA will continue to develop relationships and partnerships with these agencies and organizations as well as work to find the most efficient and cost-effective method for providing technical assistance to developing countries. The FHWA will also continue to

leverage in-kind contributions of staff time and technical information provided by AASHTO, State DOTs, and LTAP Centers in conducting technical assistance activities.

The FHWA is supporting regional networks of technology transfer centers and encouraging regional networks to link globally. A global technology transfer network will be an efficient mechanism for sharing information on new technologies, innovations, and best practices among transportation professionals throughout the world. Although the focus is generally developing countries, the network needs to include developing and developed countries in order to be effective. The primary challenge in establishing such a network is how to share information effectively and ensure that it reaches those who need it most in a format that is likely to be used. The global technology transfer network will serve as a conduit to promote U.S. expertise and technology internationally. In addition, the network will serve as a means to easily learn of new technology and best practices from the FHWA's counterparts abroad.

MARKETING BY U.S. COMPANIES OF HIGHWAY RELATED TECHNOLOGIES

Question. Please provide estimates for fiscal year 1999, fiscal year 2000 and fiscal year 2001 of the amounts of funds used or planned to be used to promote marketing by U.S. companies of highway-related technologies abroad.

Answer. The FHWA's activities in this area focus on helping U.S. firms become export-ready in collaboration with the Department of Commerce. The FHWA spent no funds in fiscal year 1999. The FHWA plans to spend $10,000 in fiscal year 2000 and $10,000 in fiscal year 2001.

INTERNATIONAL TECHNICAL ASSISTANCE PROGRAMS

Question. What benefits do FHWA's international technical assistance programs provide for the U.S. highway community? Is any cost sharing received? If so, please specify the nature and amount. If not, what might be done to further leverage the federal investment?

Answer. The FHWA's technical assistance programs are developed in response to the international mission the Congress set out in Title 23, U.S.C., section 506. The International Outreach Program charges FHWA with developing programs that: (1) inform the U.S. of technological innovations in foreign countries; (2) promote U.S. highway transportation expertise, goods, and services abroad; and (3) increase transfers of U.S. highway transportation technology to foreign countries.

Additionally, FHWA's technical assistance programs directly support U.S. foreign policy by encouraging economic development and democratization in developing countries. The countries that FHWA cooperates with receive information about U.S. transportation technology and practices which enable them to more effectively construct, manage, and maintain their transportation systems.

This investment in technical assistance indirectly promotes the exports of U.S. highway-related firms since the countries involved in technical exchange and assistance activities tend to acquire a preference for U.S. products and equipment. As these countries develop, they are able to purchase more U.S. goods and services. Examples of benefits include winter maintenance equipment sales to Chile, construction equipment to Russia, and consulting services in South Africa.

In addition, with the focus of our program being technology transfer and exchange, the U.S. highway community also learns from less developed countries. While some countries may be less developed economically, they can be innovative technically and institutionally.

The FHWA is working to secure cost-sharing partners or outside sources for its technical assistance project. For the FHWA's Russian Technical Assistance Project, the FWHA provided approximately $5 million of in-kind assistance for a $300 million World Bank-funded institutional building project from 1993 through 1998. For the FHWA's Baltic Technical Assistance Program, the FHWA has provided approximately $122,000 in technical assistance and its partner, the Finnish National Road Administration has provided an similar amount of in-kind support. The FHWA obtained approximately $527,000 in funding from the World Bank to implement its Turkish Technical Training Program. The FHWA is working to obtain funding through USAID for two highway technology transfer projects in the Southern Africa Development Community (SADC) region of Africa. The FHWA also leverages in-kind contributions of staff time and technical information provided by AASHTO, State DOTs, the private sector and Local Technical Assistance Program (LTAP) Centers in conducting technical assistance activities. The FHWA will continue to develop relationships and partnerships with these agencies and organizations as well as work

to find the most cost-effective methods for providing technical assistance to developing countries.

INTRA-REGIONAL TRANSPORT

Question. What efforts are underway in sub-Saharan Africa to improve intra-regional transport? How much was and will be allocated for this effort? Why is this an appropriate activity for FHWA to fund? What are the benefits and costs of FHWA's technical exchange program with other developed countries?

Answer. The funding for the FHWA's sub-Saharan activities is summarized below:

	Fiscal years—			
	1998	1999	2000	2001
Sub-Saharan Africa	$250,300	$65,000	[1] $200,000	[1] $275,000

[1] Planned.

Under Section 506 of Title 23 U.S.C., the Congress charged the FHWA with increasing the transfer of U.S. highway transportation technology to foreign countries through training, demonstrations, research, and other methods of technology transfer and exchange. The FHWA's initiative in sub-Sahara Africa is designed to help improve sub-Sahara Africa's access to road technology, including institutional and program-building techniques. These will, in turn, facilitate sustainable development, foreign direct investment and the flow of international trade with and within sub-Sahara Africa. The FHWA's initiatives directly support the Congress's charge in Section 506 as well as the Administration's overall foreign policy objectives for Africa.

FHWA is assisting in the establishment of a network of technology transfer centers in sub-Sahara Africa with links to U.S. technology centers and other technology transfer centers elsewhere in the world. The geographic focus of this program is the Southern Africa Development Community region which includes: Angola, Botswana, The Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe. To date, FHWA has cooperated most closely with South Africa, Tanzania and Zimbabwe. As this program is implemented, we are urging the SADC region countries to examine the role of AASHTO in the U.S. and whether a similar organization, comprised of national road agencies, would facilitate the improvement of intra—regional transport. FHWA, AASHTO, USAID and SATCC have had discussions regarding cooperation in this area. FHWA with AASHTO and USAID have further recommended that the countries of this region cooperate in the following activities:

—Development of a regional (SADC) networking model to bring about more consistent transport policies, programs, and standards across the member countries.
—Furthering institutional restructuring, including the possibility for a dedicated road funds.
—Advancing safety advocacy and results to reduce the injuries and fatalities in transportation.
—Advancing additional technology transfer points in the SADC region.
—Furthering development of strategic roadway management approaches—systems, data, training, etc.

The overall cost of the FHWA's exchange program with developed countries, including the scanning program, is approximately $650,000. The Joint AASHTO/FHWA International Scanning Program is managed cooperatively with, and co-funded by AASHTO.

The FHWA's technical exchange programs are the bridge between the U.S. and the other major producers of highway-transportation-related innovations, mainly in Western Europe and selected countries on the other side of the Pacific. Developed countries face similar transportation opportunities and constraints. Our partners across the Atlantic and Pacific are prolific sources of policy and technical innovation in transportation and have a wealth of experience to share. International exchanges have often served as catalysts for reviewing and changing U.S. practices.

Our exchanges have resulted in improvements in the way we do business in U.S. highway agencies, our approach to problems, and the solutions we adopt:

—Some U.S. transportation agencies have been spurred to act more like firms, inspired in part by the examples of Australia, New Zealand, Sweden and the U.K., with a focus on accountability and efficiency.

—The use of design-build, performance-specifications, and performance warranties in contracts are drawing on and tempered by experience gained abroad.
—Stronger concrete pavements designs, more durable asphalt pavements, and accelerated pavement testing equipment are in use here because of our international technical assessments.
—Over 25 research and demonstration projects concerning bridge composite material have been influenced by foreign observations.
—Steel bridge fabrication techniques based on computer-aided design and manufacturing are advancing because of practices learned abroad.
—High performance concrete use is spreading, inspired by successes from Canada and other countries.
—New techniques for predicting bridge scour and for controlling it are under study, stimulated by the European approach.
—Improved U.S. techniques and equipment for winter maintenance—including anti-icing measures, road-weather information systems and a large AASHTO Snow and Ice Cooperative Pooled Fund Program that is transforming U.S. practice—owe their origin to exchanges with Nordic and other countries.
—A cost-saving slope-stabilization technique is common practice in the U.S. thanks to cooperation with France and nearby countries. This technique is estimated to have saved $40 million to date.
—Safety audits are in frequent U.S. use based on successful experience observed in Australia and New Zealand.
—Overseas experience has encouraged use of speed management techniques such as variable speed limits, aggressive driving surveillance equipment, red light running cameras, and roundabouts and other traffic calming measures in residential neighborhoods.
—Foreign practices have illustrated the benefits of all white pavement markings and many innovative traffic control devices to save costs and lives. These are under evaluation for possible adoption in the U.S.
—Longitudinal tunnel ventilation introduced from abroad has saved an estimated $40 million to date.
—Guidelines for implementing ITS, improved methods for measuring pavement condition, and less road-damaging heavy vehicle suspension designs have resulted from our international cooperation.

ADVANCED VEHICLE TECHNOLOGY PROGRAM

Question. What is the status, strategic vision, and timetable for this program? Answer. The AVP is entering its second year and represents a successful transition and shift in emphasis of the Electric and Hybrid Electric Vehicle (EV/HEV) program managed by the Defense Advanced Research Projects Agency (DARPA) from fiscal year 1993 through fiscal year 1998. Building on the momentum achieved from investment by DARPA and private-public partners (a total of over $250 million from 1993–1998) for advancing medium and heavy electric and hybrid-electric vehicle and infrastructure technologies.

Since assuming management in fiscal year 1999, DOT has announced program directions for fiscal year 1999, fiscal year 2000 and fiscal year 2001–2003. In response to the fiscal year 1999 solicitation, DOT awarded 26 projects to consortia in fiscal year 1999 for a total federal contribution of $12 million—$5 million from DOT and $7 million from DARPA. These important projects are underway and well ahead of schedule in great part due to the AVP's fast-tracked public and private partnership and the use of "other transactions" agreements. Project selection for fiscal year 2000 and fiscal year 2001 is nearing completion. DOT will award funding for fiscal year 2001 projects upon allocation of the fiscal year 2001 appropriations. Neither the Department of Defense nor the Department of Energy contributed any funds to this partnership in fiscal year 2000. The President's budget for the Department for fiscal year 2001 is $20 million and is based on a consensus of Departmental leadership of the program's importance to addressing the nation's energy efficiency, environmental and national security concerns.

The Department's strategic vision for the AVP is to have U.S. commercially available and affordable, fuel-efficient, low-emission, medium- and heavy-duty vehicles. The AVP seeks annually a balanced portfolio of projects across various technologies and degrees of risk and potential benefit. This approach provides significant opportunity to capitalize on emerging developments that may not lend themselves to a "top-down" planning approach with narrow objectives and schedules. Instead, the technologies being pursued under the AVP support a broad set of objectives: (1) reductions in vehicle emissions beyond the 2004 standards; (2) a 50 percent improvement in vehicle fuel efficiency; (3) a globally competitive U.S. advanced vehicle in-

dustry; and (4) increased public acceptance of advanced transportation technology. The Department is starting to show early returns on its investment in the AVP. Projects funded in fiscal year 1999 are beginning to deliver products and demonstrate technologies, such as battery cyclers and hybrid electric drive trains, that show promise in meeting the program objectives.

Question. Please list the amount, nature, and participants in each of the contracts awarded to date that use funds from the DOT appropriations.

Answer. The amount, nature and participants in each of the projects awarded to date under the AVP are contained in the attachment, "Fiscal Year 1999 Project Summaries."

Question. How will fiscal year 2000 monies be used? On which technologies?

Answer. The fiscal year 2000 program direction to the seven regional consortia was announced late last Fall. In response to this solicitation, DOT received 26 proposals from eligible consortia. To ensure continuity from fiscal year 1999 projects and to accelerate project awards, the Department did not request concept papers and, instead, asked the consortia to submit full proposals on high-priority projects from fiscal year 1999. These projects either did not receive funding in fiscal year 1999 or, given additional funding in fiscal year 2000, would accelerate technology deployment. The proposals have been evaluated by a team comprised of reviewers from DOT operating administrations, DARPA, and DOE with support from technical experts for award selection. The team has made an initial selection of projects for fiscal year 2000 funding, and negotiations are proceeding with the consortia for project award in May. We will forward a summary of those projects once awarded.

Question. What is the empirical basis for the amount requested? How will those funds be allocated?

Answer. The Electric Vehicle and Hybrid Electric Vehicle Program under the Defense Advanced Research Projects Agency (DARPA) was funded at an annual level of $15 million for the past several years. Recognizing the need to continue the momentum of this partnership, the Transportation Equity Act for the 21st Century authorized the AVP at an annual level of $50 million.

Additionally, the transportation sector accounts for about 65 percent of the national petroleum consumption. The U.S. transportation sector itself is 97 percent dependent on petroleum. This means that the transportation sector accounts for nearly one-third of the CO_2 emissions in the U.S., with motor vehicles accounting for about 25 percent alone. Pollutants from motor vehicles are major contributors to problems with urban air quality. Technologies developed through this program could significantly increase the energy efficiency of vehicles while reducing their emissions. The program, if successful, could significantly reduce greenhouse gas emissions by improving fuel efficiency of medium- and heavy-duty vehicles and by using alternative fuel and hybrid technologies. Several of the projects are now graduating from a concept testing phase to a product implementation stage, requiring two to three times larger project investment. The $20 million requested for fiscal year 2001 will enable DOT and the consortia to sustain products emerging from the program to meet the program objectives.

The fiscal year 2001 funds will be allocated using the current competitive process developed under the DARPA Program. The exact allocation in fiscal year 2001 is pending completion of the selection process.

ADVANCED VEHICLE CONSORTIA PROGRAM

Question. In the fiscal year 2000 conference report, the conferees directed that FHWA include with the fiscal year 2001 budget request a report that delineates a detailed strategic spending plan for the advanced vehicle consortia program. Please explain why the report is not in the budget justification.

Answer. The Department recently completed a document, Medium- and Heavy-duty Vehicle R&D: Strategic Plan. The Plan not only responds to a Congressional mandate, but also provides a framework for the multitude of research activities focused on advanced medium- and heavy-duty vehicle technologies that are supported by DOT. The Secretary of Transportation submitted the Plan to both the House and Senate Committees on Appropriations.

Question. When will this requirement be implemented?

Answer. The Department recently completed a document, Medium- and Heavy-duty Vehicle R&D: Strategic Plan. The Plan not only responds to a Congressional mandate, but also provides a framework for the multitude of research activities focused on advanced medium- and heavy-duty vehicle technologies that are supported by DOT. The Secretary of Transportation submitted the Plan to both the House and Senate Committees on Appropriations.

Question. Please summarize your initial thinking regarding a strategic spending plan.

Answer. The DOT Medium- and Heavy-duty Vehicle R&D: Strategic Plan builds on strategic planning efforts of the Department and the National Science and Technology Council Committee on Technology's Transportation R&D Subcommittee, as documented in the DOT Strategic Plan and National Transportation Science and Technology Strategy, respectively. The Plan addresses DOT research and development activities, including the Advanced Vehicle Technologies Program (AVP), that support improvements in environmental characteristics and energy efficiency of medium- and heavy-duty vehicles. The Plan not only responds to the Congressional mandate but documents the early stages of what will be an ongoing strategic planning process specific to medium- and heavy-duty vehicle R&D. In addition, it will be used as an input for a broader Federal R&D Plan under the aegis of the National Science and Technology Council Committee on Technology.

FIFTY PERCENT NON-FEDERAL MATCH

Question. In the fiscal year 2000 conference report, the conferees directed that "all development, demonstration, and deployment projects to be funded within the advanced vehicle consortia program require at least a fifty percent non-federal match and that none of the funds provided for this program shall be used to advance magnetic levitation technology." How is this requirement being implemented?

Answer. As with the DARPA Electric Vehicle and Hybrid Electric Vehicle Program, the AVP has maintained the requirement for the consortia to at least match the Federal funding levels. The ratio of private to public investment will be at least 1:1.

The Department of Transportation has mechanisms in place to ensure that the funds provided for the AVP will not be used to advance magnetic levitation technology. An executive team, made up of DOT and other agency representatives, define and approve the technology focus areas of the program that offer the most promise in meeting the objectives of the program. A multimodal team of technical experts evaluate and select project proposals that meet these technology focus areas.

COST SHARING

Question. For each project funded, please specify the amount of any cost sharing.

Answer. The fiscal year 1999 AVP projects and corresponding consortia cost share are listed in the following table.

Project	*Cost Share*
WestStart—CALSTART:	
Fuel Cell Auxiliary Power Unit for Over-the-Road Trucks	$1,055,000
Electric Propulsion System for Medium- and Heavy-Duty Vehicles	200,000
Hybrid Electric Transit Bus with Flywheel Power Management	629,975
All-Purpose Electric Airport Tow Tractor	217,596
Electrochemical Capacitors Using Carbon Lead-Oxide Electrodes	87,000
ELECTRICORE:	
The AV–900 Cycler: A 600–900 Volt Test System for Heavy Duty Hybrid Electric Vehicles	2,032,000
Installation of Capstone Microturbines into Cape Cod Passenger Trams	37,500
Advanced Silicon Carbide Power Electronics	675,104
Hawaii Electric Vehicle Demonstration Project:	
Electric Vehicle Ready State	817,395
Zero-Emission 100 Passenger Electric Tram for Airports	1,938,000
Battery Cycle Life Prediction	225,263
Mid-Atlantic Regional Consortium for Advanced Vehicles:	
Unmanned Hybrid Electric High Mobility Multi-Purpose Wheeled Vehicle	(1)
20kWh Nickel Hydrogen Segmented Battery for Hybrid Electric Military Vehicles, Commercial Trucks, and Buses	165,778
Optimization of a Compression Ignition Engine Generator System for Heavy-Duty Hybrid Electric Vehicles	308,000
Integrated Simulation and Testing System for Electric Vehicle Batteries	532,224
Smaller, Better Inverters with Polymer Multi-Layer Capacitors	227,536
Hybrid Electric Bradley Fighting Vehicle Demonstrator Testing and Model Refinement	(1)

Project	*Cost Share*
Northeast Advanced Vehicle Consortium:	
Model Park for the 21st Century	570,000
Heavy-Duty Hybrid Electric Vehicle Emission Test Certification Protocol	300,000
Battery Electric Dominant Heavy-Duty Hybrid Electric School Bus	312,000
Jet Vapor Deposition for Catalyzing Fuel Cell Membranes	350,000
Southern Coalition for Advanced Transportation:	
Utility Industry Trouble Truck and Mobile Power Source	545,029
Hybrid Electric High Mobility Multi-Purpose Wheeled Vehicle Improvements	(1)
Demonstration of Advanced Components on the Advanced Technology Transit Bus	(1)
Sacramento Electric Transportation Consortium:	
Nickel Metal Hydride Battery System for an Electric Bus	650,000
Plastic Lithium Ion Hybrid Electric Vehicle Battery	821,000

[1]Match not required. These projects did not require a consortia match because they are continuations of projects under the DARPA EV/HEV Program, and the products/vehicles resulting from these projects will be solely for military use.

EVALUATION OF THE ADVANCE VEHICLE PROGRAM

Question. What measures have you developed to evaluate the success or progress of this program? What are your initial indications of the value of this investment?

Answer. One of the major goals of AVP is to assist in the commercialization of electric and hybrid electric vehicles, and to help develop the supporting industrial and technological base and infrastructure. To evaluate the success or progress of this program, DOT has started to establish the current electric and hybrid electric vehicle commercial and technology "baselines", from which future progress can be measured. This is similar in approach to what DARPA did at the start of its program in 1993–1994. "Success and progress" for this program will include all aspects—growth and health of the U.S. industrial base in this market area; technological advancements such as improved range, energy efficiency, and reduced emissions; the introduction of enabling technologies such as improved auxiliary components and cheaper manufacturing capabilities; and deployment of the advanced vehicles and supporting infrastructure. The vehicles already in use are being quantified and will establish a baseline for future comparisons. The same can be said for key technology specifications of key components such as batteries, fuel cells, and more efficient engines and drive trains.

Initial indications show good return on the Federal investment in the AVP. The success of this program builds on that already realized under DARPA's EV/HEV Program. Both New York City and Tempe have recently procured or announced the intent to purchase hybrid electric transit buses in quantity. The company (AVS, Chattanooga, TN) that is filling the Tempe bus order has been a direct beneficiary of the AVP, and the DARPA program before it, and would likely not be in this position today without the Federal investment. Allison Transmission has recently teamed with AeroVironment to develop through the AVP a 600–900 V battery cycler—essential new hardware for testing batteries and drive system integration for higher voltage systems—the direction that the industry is starting to move toward. The Army has announced an intent to purchase a prototype high power, compact inverter that will be completed under the AVP. Initial tests of using a small fuel cell in a class 8 truck designed to take the auxiliary load (thus eliminating the need for costly, inefficient, and environmentally unfriendly overnight engine idling) have looked promising. If successful, the opportunity for including a fuel cell as part of the propulsion system for a hybrid electric truck may be closer to reality. Also, some early results for high power switching devices based on Silicon Carbide materials (being conducted at Rutgers University) look very promising and could eventually result in some dramatic reductions in size and weight of systems for electric vehicles and hybrid electric vehicles, and revolutionize other markets as well.

NATIONAL TECHNOLOGY DEPLOYMENT INITIATIVE

Question. Please specify how the fiscal year 1999, fiscal year 2000, and fiscal year 2001 funds were or will be used.

Answer. Technology deployment is made up of two primary parts: the Technology Deployment Initiatives and Partnerships Program (TDIPP) and the Innovative Bridge Research and Construction Program (IBRCP). These programs also allow discretionary funding to foster alliances and support efforts to stimulate advances in transportation technology including testing and evaluation of Strategic Highway Re-

search Program (SHRP) products, further development and implementation of technology in areas such as the SHRP Superpave system, support for SHRP's long-term pavement performance product implementation and technology access, and other activities in support of the five national goals of the TDIPP program. For presentation purposes in response to this question, this discretionary funding will be referred to as "other."

In fiscal year 1999—$30,905,000 available (Note: All funds reflect a reduction of 11.7 percent for the obligation limitation ceiling):

—86.2 percent of the $4,989,000 in TDIPP funds were obligated for designated recipients (5 of 6) under 5116. The remaining 13.8 percent (1 of 6—The principal investigator passed away and the university is reconsidering their proposal) may be awarded before the end of fiscal year 2000.

—100 percent of the $5,092,000 in TDIPP funds were obligated for the five designated recipients under § 5117.

—100.0 percent of the $4,415,000 in TDIPP funds were obligated for the designated recipient under § 3015(c)

—50.0 percent of the $1,060,000 in TDIPP funds were obligated for the designated recipient under Senate Bill S.2307 [CAST/Auburn University].

—89.0 percent of the $14,128,000 in IBRCP funds were obligated under § 5103.

—90.0 percent of the $1,221,000 in "other" funds were obligated.

In fiscal year 2000—$34,840,000 available (Note: All funds reflect a reduction of 12.9 percent for the obligation limitation ceiling):

—100.0 percent of the $5,021,150 in TDIPP funds will be obligated for designated recipients (6) under § 5116

—100.0 percent of the $4,823,157 in TDIPP funds will be obligated for designated recipients (5) under § 5117

—100.0 percent of the $4,355,000 in TDIPP funds will be obligated for the designated recipient under § 3015(c)

—100.0 percent of the $14,807,000 in IBRCP funds will be obligated under § 5103. The remainder will be obligated before the end of fiscal year 2000.

—100.0 percent of the $5,833,693 in "other" funds will be obligated.

In fiscal year 2001—$36,217,000 available (Note: All amounts following are projected. No obligation limitation ceiling estimated):

—100.0 percent of the $5,151,000 in TDIPP funds will be obligated for designated recipients (6) under § 5116

—100.0 percent of the $4,367,000 in TDIPP funds will be obligated for designated recipients (5) under § 5117

—100.0 percent of the $5,000,000 in TDIPP funds will be obligated for the designated recipient under § 3015(c)

—100.0 percent of the $21,000,000 in IBRCP funds will be obligated under § 5103

—100.0 percent of the $699,000 in "other" funds will be obligated.

All of the projects designated under Sections 3015(c), 4021, 5103, 5116, 5117, and Senate B. S2307 will be funded as part of the Technology Deployment Program.

In fiscal years 1999 and 2000, $36.9 million of Innovative Bridge Research and Construction (IBRC) Program funds were allocated to 40 State Departments of Transportation (State DOT) in order to pay the Federal share of 116 projects to repair, rehabilitate, or replace bridges or structures using an application of an innovative material. In fiscal year 2001, $20.0 million of IBRC funds will be allocated to the State DOTs for similar bridge projects which also demonstrate the application of innovative materials. Approximately 60 new projects will be funded in fiscal year 2001. In fiscal years 1999 and 2000, $2.5 million of IBRC funds were/will be allocated to research, development, and technology transfer (R, D & T) activities which include: documentation and evaluation of performance of innovative material bridge applications; dissemination of performance results to the U.S. bridge engineering community; development of material specifications and design codes to support successful innovative material applications; and research into issues critical to further development of innovative materials. In fiscal year 2001, $1.0 million will be allocated to similar efforts.

TECHNOLOGY DEPLOYMENT

Question. Which projects will be funded and how will those benefit the states? Please provide specific examples of the tangible benefits and expected costs that are expected to result from that initiative.

Answer. Designated projects will benefit states by using advanced materials and innovative technologies to extend infrastructure durability and reduce life-cycle costs. Also, of benefit to States are "quality of life issues" where these innovative technologies can reduce the human costs of run-off-the-road crashes and trauma-re-

lated injuries; reduce user delays and improve safety during constructing and maintaining surface transportation facilities; reduce the impact of severe weather events on users of surface transportation systems; and improve community-oriented transportation and sustainable development and support and enhance the environment.

Four of the designated grant recipient institutions under the Technology Deployment Initiatives and Partnership Program (TDIPP) are doing research into trauma and crash related injury mitigation. Physicians define the "Golden Hour" as the time immediately following a crash where access to appropriate medical care is critical to patient survival. After considering the research to be performed by these institutions, in a "holistic" sense, they all can be synergistically tied to giving those injured in vehicular crashes a better chance of survival. These technologies relate to improved monitoring and coordination in emergency response; improved drugs to stabilize and prevent deterioration of crash victims' injuries while at the crash scene; improved vehicle occupant protective system operation and deployment; and improved vehicle sensors to identify crash severity and potential occupant injury.

Three of the designated grant recipient institutions under the TDIPP are doing research related to developing and advancing prototype deployment of operational intelligent transportation infrastructure systems for measuring various transportation system activities to aid in transportation planning and analysis in two major metropolitan areas. Once these prototypes are operational and proof-of-concept questions have been resolved; deployment of similar systems are planned for deployment in 40 more major metropolitan areas.

Under the Innovative Bridge Research and Construction (IBRC) Program many States are involved in developing new, cost-effective innovative material highway bridge applications; reducing maintenance costs and life-cycle costs of bridges, including the costs of new construction, replacement, or rehabilitation of deficient bridges; developing construction techniques to increase safety and reduce construction time and traffic congestion; developing engineering design criteria for innovative products and materials for use in highway bridges and structures; developing cost-effective and innovative techniques to separate vehicle and pedestrian traffic from railroad traffic; developing highway bridges and structures that will withstand natural disasters, including alternative processes for the seismic retrofit of bridges; and developing new nondestructive bridge evaluation technologies and techniques.

This program is intended to demonstrate the application of innovative material technology in the construction of bridges and other structures—grants are made to the states to pay the Federal share of the cost of repair, rehabilitation, replacement, and new construction of bridges or structures that demonstrate the application of innovative materials. Also grants, cooperative agreements and contracts are entered into with states, other Federal agencies, universities and colleges, private sector entities, and nonprofit organizations to pay the Federal share of the cost of research, development, and technology transfer (R, D & T) activities related to bridge applications of innovative materials.

The following information pertains to continuing initiatives being funded in fiscal year 2001:

Center for Advanced Vehicle Technology.—The objective is to form a well-equipped interdisciplinary capability at the University of Alabama at Tuscaloosa to address a range of issues related to advanced vehicle development and operation. During the first year of operation, progress has been made to develop the administrative structure for the Center. Equipment has been purchased to improve the measurement of key engine properties including emissions. Five grants were awarded on various vehicle issues and a lecture series was introduced which brings experts from other parts of the country to share insights. Several presentations have been made throughout the country to introduce the Center to others and to begin build partnerships. Expected cost for fiscal year 2001 for this initiative is $400,000.

Smart Bridge Research Project.—The principle purpose of this grant is to research, design, and demonstrate technically feasible, economically acceptable and environmentally compatible Smart Bridge systems to enhance the nation's highway system safety ad reduce its life cycle cost. A medium-scale deck section has been constructed. They are currently working to develop and validate advance modeling software. The research team is refining their deck heating system design. Continuous investigations are underway into systems to measure and analyze weather data, including sensor testing and development of integrated control strategies. Work has also begun on corrosion assessment, life-cycle economic analysis, and an operational web site for technology transfer. Expected cost for fiscal year 2001 for this initiative is $1,000,000.

Advanced Trauma Care.—The Alabama Trauma Registry (ATR) has been established. Hospitals in the state that see a sizeable number of trauma patients each year were identified and contacted to obtain their support in collecting data using

the American College of Surgeons (ACS) trauma registry database (TRACS). A protocol and time line has been developed to transfer the data to the ATR. The transfer of data from the participating hospitals to the ATR is presently in the pilot phase. However, it is expected that all major trauma hospitals in the state will be providing trauma data to the ATR by July 2000. Data from this project and others will be used to make recommendations and establish protocol for the routine collection of data to provide better patient care. Expected cost for fiscal year 2001 for this initiative is $750,000.

Transportation Injury.—The Center for Transportation Injury Research (CenTIR) projects are underway to provide real-world demonstrations and evaluations of advanced technologies, systems and programs. These projects are advancing crash detection and notification technologies with crash injury assessment. They are also improving the process of providing emergency triage, transport, and treatment of crash injured people. The CenTIR research has advanced technical and governmental understanding of technological opportunities for, and institutional hurdles to, improving the safety of U.S. motorists. The CenTIR research has helped define the safety potential for automatic crash notification technologies and the need for providing enhanced wireless 9–1–1 service nationwide. The CenTIR research is being used at the Federal, State and local levels. At the Federal level, the CenTIR communications on the safety potential of using wireless technologies to improve crash safety has been used in the NHTSA, FHWA, and JPO. In addition, the CenTIR research has been a part of the deliberations of the NTSB, the FCC, and the Congress. On October 26, 1999, the President signed into law the Wireless Communications and Public Safety Act of 1999 that found "emerging technologies can be a critical component . . . to reduce emergency response times and provide appropriate care."

Grantees are in their second year of effort of interdisciplinary research on ways to reduce the occurrence, severity, and consequences of crash related injuries that now amount to nearly five million people each year in the U.S., including 42,000 deaths. Expected cost for fiscal year 2001 for this initiative is $2,000,000.

Head and Spinal Cord injury.—The Neuroscience Center for Excellence and the Virginia Transportation Institute collectively are working on the development and implementation of a motor vehicle crash victim data registry, the investigation of mechanisms of neurotrauma, and the exploration and evaluation of novel neuroprotective drugs relative to this project.

Work has commenced in collision avoidance research and crash analysis research. Under collision avoidance, the following tasks are underway: (a) literature review of collision avoidance methods and developments, (b) development of a driving simulator laboratory, and (c) review and comparison of specific adaptive or intelligent cruise control systems. In the category of crash analysis research, the following tasks are underway: (a) finite element modeling of vehicles, (b) development of a folded/vented airbag model, (c) mathematical simulation of crash test dummy certification procedures and comparison to equivalent laboratory data, and (d) airbag modeling code evaluation and validation.

The motor vehicle crash data base now contains data on 400 victims with more than 2000 documented injuries. A Microsoft Access database is maintained on an Internet server, providing 24-hour update capability and access. An improved percussion apparatus has been developed to support experimental head trauma experiments utilizing a rat model. Preliminary studies have been conducted to identify upregulation of the CO_X2 gene in the brain preceding irreversible injury. Experimental strategies for screening and evaluation of neuroprotective drugs have been devised.

Preliminary collision avoidance literature review is completed. All components required to assemble the driver simulator are now available for assembly. Portions of vehicle model development have been completed. Air bag code evaluation has begun. Expected cost for fiscal year 2001 for this initiative is $500,000.

Motor Carrier Advanced Sensor Control System.—The initial task of the study is underway. It includes a literature review and related analyses of accident databases. The detailed project scope is under development. The Truck Manufacturers Association is working with the Federal Motor Carrier Safety Administration and the contractor to implement this program. The first task under the contract, which is nearly complete, was an assessment of several potential safety and operationally-oriented categories of sensors and sensor systems. A meeting with interested original equipment manufacturers (OEMs) and Commercial Motor Vehicle operators was held in late February, and the draft task report is currently under review. A statement of work is being prepared as a follow-on assessment for several of the sensor categories reviewed in Task 1, and adding some others in response to stakeholder input. The plan is to follow on with tasks to arrange hands-on work in the lab and test track, and possible work in the field environment. Expected cost for fiscal year 2001 for this initiative is $700,000.

Intelligent Transportation Infrastructure System.—This project provides for the development and deployment of a system that collects and distributes real time traffic conditions data for operations purposes; and archives this data for planning, analysis, and maintenance purposes. The project design is well underway in Pittsburgh and will begin later this year in Philadelphia. Authorization to proceed in Philadelphia will be granted upon approval of the Pittsburgh design. Given current progress, system implementation is expected around July 2000 in Pittsburgh, and in November 2000 in Philadelphia. The local user needs have been identified and the overall system requirements have been defined in Pittsburgh. The sensor siting and design are near completion and software development is under way. The evaluation of the project will begin once the system is deployed. Expected cost for fiscal year 2001 for this initiative is $1,700,000.

Advanced Traffic Monitoring and Emergency Response.—The first phase of the project has begun and involves a feasibility and needs study to identify appropriate Intelligent Transportation Systems (ITS) user service requirements. Also, this phase involves defining the overall scope of the project. Interviews with individual stakeholders are being completed. To provide guidance for the feasibility study, an Oversight and Technical Advisory Committees has been established. The design phase will begin upon completion of the study, which is anticipated by July 2000. An assessment of needs, along with relevant technologies and best practice models, will be available upon completion of the feasibility study. A conceptual plan and the appropriate next steps will also be defined at that time. Expected cost for fiscal year 2001 for this initiative is $1,667,000.

Technology of Transportation Economic and Land Use System (TELUS).—The New Jersey Institute of Technology is currently in the development and deployment phase of this program. The objective is to support State governments and Metropolitan Planning Agencies by developing an automated data base to report on the status of projects. A Beta test group, composed of 15 MPOs, has been formed and is currently testing an early release of TELUS. The Beta test group has reported very good results and is anxious to receive the final version. Expected cost for fiscal year 2001 for this initiative is $1,000,000.

Innovative Bridge Research and Construction Program.—Under this program repair, rehabilitation, and new construction projects involving several different innovative materials and a broad range of structural applications are being funded. Materials include fiber reinforced polymer (FRP) composites; high performance 70ksi weathering steel (HPS 70W); FRP reinforced wood glulam members; high strength, durable concrete (HPC); stainless steel clad reinforcing bars; innovative bridge coatings; innovative anodes for cathodic protection, etc. Applications include durable, lightweight bridge decks; HPS 70W steel bridge beams; HPC concrete bridge decks; durable concrete bridge decks reinforced with FRP reinforcing bars or stainless steel clad bars; understrength and/or deteriorated bridge members reinforced externally with FRP sheets or FRP prestressing tendons; bridge columns, susceptible to seismic damage retrofitted with FRP "wraps"; etc.

One example of tangible benefits is installation of new lightweight bridge decks which allow for increased load limits on posted bridges—an example is the Maryland State Route 24 bridge over Deer Creek; replacement of the concrete deck with a lightweight FRP deck will enable the DOT to maintain this 1934 historic truss in service at minimal cost and mitigate the need for more costly rehabilitation. Deck installation is expected to require one week versus 5 to 6 weeks with a reinforced concrete deck. Another example is new bridge decks reinforced with stainless steel clad reinforcing bars, such as the State Route 82 bridge over Red Creek in Delaware, where the deck is expected to be resistant to salt induced corrosion and deterioration of concrete decks reinforced with mild steel. On this project, the understrength steel beams will also be reinforced with carbon FRP sheets.

Technology transfer efforts such as an International Symposium on High Performance Concrete for Bridges (co-sponsored with the Prestressed/Precast Concrete Institute—PCI) and a National Conference on High Performance Steel for Bridges (co-sponsored with the American Iron and Steel Institute—AISI) will keep the bridge engineering community abreast of developments in deploying innovative materials in bridges. Total expected cost for fiscal year 2001 for this program is $21,000,000.

Advanced Technology Pilot Program.—To date, one project group has been selected. General Atomics Corporation (GA) will lead a team to develop Maglev technology for the purpose of providing a solution to urban and regional transportation problems. The GA team will develop low speed magnetic levitation technology in the following main task areas: (1) system studies, (2) base technology development (including technical risk identification and resolution), (3) route specific requirements, and (4) projection of overall system performance and a preliminary design for a full scale demonstration system concept. The team is comprised of federal, state, and

local government representatives along with many industrial organizations. Expected cost for fiscal year 2001 for this initiative is $5,000,000.

EVALUATION OF THE ADVANCED VEHICLE PROGRAM

Question. What measures have you developed to evaluate the success or progress of this program?

Answer. We have a Legislative Implementation Plan in effect whereby Core Business Units and Service Business Units within FHWA (and program offices in other modal administrations within U.S. DOT) have technical representatives identified to track achievements and monitor progress for each of these identified initiatives. Additionally, we develop summary reports on progress of these initiatives and submit the reports biennially to the Congress. Success of the IBRC program will be demonstrated in 4 ways: (1) selection and funding of projects which support the program goals established in TEA–21; (2) construction of each innovative material bridge application in the field; (3) monitoring and evaluation of the performance of each application during short and long term service; (4) dissemination to the bridge engineering community of "lessons learned" and material, design and construction specifications developed so successful applications can be deployed on a widespread basis.

Project selection is based on a set of criteria which incorporate the TEA–21 IBRC program goals and which have undergone critical review by the State DOTs, by the industries which produce innovative materials and by the bridge engineering community at-large. The IBRC funded projects including the 116 different projects already funded are being conducted on varying schedules according to the individual States' construction programs. Some projects have already been let for construction. One example is the replacement of the deteriorated concrete deck on the Salem Avenue Bridge over the Great Miami River Bridge in Dayton, Ohio, which will be reopened for traffic in May 2000. Most other projects are underway or will be let for construction in the Spring of 2000. The FHWA division offices are closely monitoring the implementation of each project.

The State DOTs are strongly encouraged to include instrumentation and post-construction monitoring of the innovative material applications in each project request. All of the 116 IBRC funded projects have such a phase incorporated in the project plan. Most of the evaluation efforts are being conducted by either State DOT research agency and/or by University staff with extensive experience in the innovative material being used. In addition, FHWA will initiate regional and/or national evaluation studies for applications where several projects are underway in different states and different operating conditions. Examples include a coordinated evaluation of the performance of at least 24 bridge decks constructed of fiber reinforced polymer (FRP) composites and a coordinated evaluation of stainless steel clad reinforcing steel used in concrete bridge decks.

FHWA is developing a comprehensive database of all projects funded under the IBRC. A wide range of information (as appropriate) will be collected/measured on each project: type and size of bridge; traffic volumes and loadings; innovative material and material specifications; details of structural application; design loads and design codes used; costs of fabrication and installation; cost and construction time savings compared to "traditional" solutions to the projects being built; performance data; etc. Progress and success of the program and of individual project applications will be done on a continuing basis. Dissemination of results, "lessons learned", etc. will be done continually, via an IBRC web site and the IBRC database as well as through engineering conferences, papers and presentations and site specific technical assistance to State DOTs and local highway agencies pursuing similar innovative material bridge applications.

TECHNOLOGY DEPLOYMENT PROGRAM

Question. What are your initial indications of the value of this investment?

Answer. Technology Deployment program funds are a significant part of FHWA's overall R&T program, as they help to create of an environment for innovation among our partners and customers through encouraging the application of new technologies and approaches.

This is especially true for the IBRC program, where initial indications point to a high degree of success. Two solicitations for bridge projects resulted in 289 applications with over 88 percent of these eligible for IBRC funding. Total funds requested were in the order of $190 million (versus $37 million available for allocation). The degree of innovation is notable with many previously untried applications including FRP composites, stainless steel clad reinforcing, etc. being proposed. State DOTs and local agencies have seen the program as not only a source of funds for

innovation, but also as helping to offset the risk of utilizing higher risk (in terms of cost and technical performance) applications. Projects such as the Salem Avenue bridge in Dayton are proving that the innovative applications are feasible to build and do produce tangible benefits. Projects such as the HPS 70W steel bridge on Tennessee State 58 over the Clinch River are documenting the technical case for HPS steel as well as the potential for lower capital construction costs. Other projects in other states are expected to produce similar findings.

The TDIPP program also does contribute to innovation, as the initiatives strengthen current relationships and broaden the range of contacts which benefit FHWA in defining and executing R&T programs. The Department's overall strategy is to sharpen the focus on delivering innovation, and to work with all representatives of the transportation community to ensure an effective and efficient transportation system. The significant number of designated recipients of TDIPP funds has limited our ability to focus these program resources on high-priority areas, but we do actively work with program participants to advance innovation and to maximize support of US DOT goals and objectives.

Question. For both fiscal year 2000 and fiscal year 2001, how much of the funds will be used for research purposes and how much for grants to states and local governmental entities?

Answer. In fiscal year 2000, $700,000 was provided for TCSP research, evaluation and technical assistance. A total of $871,000 has been requested for research, evaluation and technical assistance in fiscal year 2001.

Question. Please highlight some of the innovative strategies and projects selected for fiscal year 2000.

Answer.

Colorado.—Denver Union Station Work and Entertainment Connection—Cost effective and community-friendly alternative transportation connections at a primary intermodal transportation center.

Delaware.—Centerville Village Plan—Innovative strategies to preserve and revitalize historic community and protect surrounding open space.

Florida.—Teenagers, Transportation Planners and Residents Team Together to Tackle the Treasure Coast Transportation Plan.

Illinois.—A Sustainable Transportation and Land Use Plan for the Route 47 Kishwaukee River Corridor Developed with a Watershed-based Approach Through Community Consensus.

New Mexico.—Santa Fe/Solana Neighborhood Center B: A Model for Growth Without Sprawl.

Oregon.—Oregon Telecommunity Center Project: A Replicable Model for Sustainable Rural Communities.

TRANSPORTATION AND COMMUNITY AND SYSTEM PRESERVATION PILOT PROGRAM (TCSP)

Question. What is the need and demand for the additional $25 million in LGOE funds requested for the TCSP?

Answer. Requests for TCSP Program funding has consistently exceeded the available TCSP funds. In fiscal year 2000, applicants from 48 states and the District of Columbia submitted 292 proposals totaling $151 million for funding consideration. TEA?21 authorizes $25 million for this program in fiscal year 2001. Applicants from 46 states, the District of Columbia and Puerto Rico submitted 298 proposals totaling more than $196 million for consideration in the fiscal year 2001 TCSP Program. This overwhelming response indicates a pressing need in communities to leverage resources to make their communities more livable. The increased funds would expand the number of communities that are able to participate in the program and the range of strategies that are implemented to improve linkages among transportation and community planning and system preservation practices.

Question. What measures have you developed to evaluate the success or progress of this program?

Answer. The evaluation of TCSP projects will focus on the following key areas: process evaluation, product evaluation and outcomes. However, appropriate goals and objective, performance measures and evaluation methods will differ for each project because of the broad range of initiatives as well as the diverse mix of geographic areas and project scopes. The lessons learned from project evaluations will be used in evaluating the overall TCSP Program. Lessons learned from this pilot program will be shared with other communities across the country.

Question. What are your initial indications of the value of this investment?

Answer. The TCSP Program allows States, Metropolitan Planning Organizations and local governments to compete for funds to develop and test new transportation approaches for addressing the relationship between transportation and community

and system preservation. The TCSP program is meeting a critical need for funds to support community-based planning and implementation projects. These funds are often used by applicants to leverage other public and private moneys in order to maximize transportation and community development investments. Lessons learned from this pilot program will be shared with other communities across the country.

SURFACE TRANSPORTATION RESEARCH FUND CATEGORIES

Question. Please provide a table showing carryover funds for each of the last two years for each of the traditional surface transportation research fund categories.

Answer. The carryover funds for each of the last three fiscal years are shown below by subaccount or research categories.

[In thousands of dollars]

Program	Fiscal years—		
	1999	1998	1997 Carryovers
Surface Transportation Research:			
Safety	594	100	1,235
Pavements	1,873	1,408	.....
Structures	2,212	1,634	88
Environment	251	370	95
Real Estate Services	3	.....	.....
Policy	60	.....	30
Planning	172	.....	.....
Motor Carriers	454	858	2,327
Basic Research	441	72	72
Technology Assessment and Deployment	937	65	300
Long-Term Pavement Performance	16	11	.....
R&T Technical Support	1,419	345	.....
Local Technical Assistance Program	242	407	.....
National Highway Institute	718	130	669
Eisenhower Fellowship	335	116	1
Advanced Research	34	.....	.....
Highway Operations	41	.....	.....
Minority Business Enterprise	.....	.....	14
International Transportation	101	191	168
Russia Technical Assistance	.....	.....	2
Federal Lands Contamination Clean-up	.....	1,774	1,774
ITS Research and Development	38,129	3,773	351

APPROVAL FOR FUNDING SHIFTS OF MORE THAN 10 PERCENT

Question. In House Report 104–177, reprogramming guidelines state that congressional approval is required for funding shifts of ten percent or more among programs, projects and activities. Please show the amounts, nature, and source of any funding shifts that were implemented in fiscal year 1999 and thus far in fiscal year 2000.

Answer. There were no funding shifts in fiscal year 1999 or thus far in fiscal year 2000 which fall within the reprogramming guidelines in House Report 104–177.

PURPOSE AND COSTS OF FOREIGN TRIPS

Question. Please provide a table listing the purpose and costs incurred for each of the foreign trips taken by each of the Core Business Program Directors during fiscal year 1999 and thus far during fiscal year 2000.

Answer. The information is summarized in the table below.

Core Business Unit	Fiscal year	Destination	Purpose	Cost
Infrastructure	1999	Sweden, Denmark, Germany, Netherlands, France.	To participate in the Recycled Secondary Materials Scanning Mission.	$4,934.50

Core Business Unit	Fiscal year	Destination	Purpose	Cost
Operations	1999	Sweden	Participation in the World Road Association (PIARC) bi-annual meeting of the Intelligent Transport Committee.	2,388.34
Environment and Planning	2000	Mexico	To participate in the 12th Joint Working Committee meeting.	1,326.03
Infrastructure	2000	Mexico	To make a technical presentation at the Asphalt Recycling and Reclaiming Association's 24th annual meeting.	1,529.03
Operations	2000	Malaysia	To participate in the PIARC XXIst World Road Congress.	3,546.60
Operations	2000	Canada	To participate in the annual ITS World Congress.	1,878.34

GENERAL ADMINISTRATION AND OVERSIGHT

Question. Please list each of the completed 1998 and 1999 reports prepared by your Corporate Management Office. Also summarize the key recommendations of each report. Please indicate how FHWA responded to each of those recommendations.

Answer.

1. Review of the Dwight David Eisenhower Transportation Fellowship Program, (Internal Draft Report), February 1998—Internal report concluded that both the Graduate Fellowship element and the minority serving institutions elements (HBCU, HSI, and Tribal Colleges) of the program are meeting the objective of "attracting qualified students to the field of transportation." Activities are underway to respond to the recommendations to expand and improve advertisement of the program, assure timely and reliable stipends, improve mentoring by transportation professionals, improve and update the database of participants and enhance networking opportunities for participants.

2. FTA/FHWA Metropolitan Office Status Review, March 1998—Internal report concluded that "the LA Metro Office is a success and has markedly improved service to FTA and FHWA partners in the LA region." The report was used as a model for assessing the success of other Metropolitan Offices.

3. The Role of the Federal-Aid Division in Highway Safety, April 1998—Recommendations focused on how to integrate highway safety across all functions and through all organizational levels. A number of activities have resulted from these recommendations including a national conference for Federal Motor Carrier Safety Administration and FHWA highway safety specialists, development of new training curriculum, planning a leadership seminar for FHWA management, greater involvement by field staffs with non-traditional partners, and improved information sharing among both FHWA field offices and FHWA field offices and headquarters. All of these activities have increased the emphasis within FHWA for integration of highway safety issues in other highway functions and advocacy activities by FHWA field highway safety specialists.

4. Meeting the Customer's Needs for Mobility and Safety During Construction and Maintenance Operations, September 1998—The report recommended a variety of actions from development of improved technology to working with our partners and customers to employ work zone management principles to improve work zone operations. The report established an operational baseline for FHWA to measure existing conditions and future improvement. It also developed a "Model Work Zone Traffic Management Program and Self Evaluation Guide" for use by State and local units of Government. The report, and Executive Summary and Guide were distributed to cities, counties, States, and industry. A cross-functional team was created that has extensively used the report recommendations identify its work. Activities of the team include the following, all of which respond to recommendations of the report: (1) a best practices guidebook which presents a collection of highway community best practices, submitted from across the Nation has been created in partnership with AASHTO, (2) in partnership with AASHTO and the American Traffic Safety Services Association the FHWA sponsored National Work Zone Safety Awareness Week, April 3–7, 2000, (3) is developing user friendly computer software tools which accurately analyze and reliably predict work zone impacts, (4) encouraging FHWA field offices to engage states in assessment of their traffic management program using the Self Evaluation Guide developed in this review, and (5) developing a new driver work zone safety awareness education program.

5. Evaluation of the Office of Motor Carrier's National Training Center, May 1999—This internal evaluation concluded that the processes and procedures in place at the NTC for the administration, management, development, delivery, and evaluation of the motor carrier training program met the Systematic Approach to Training (SAT) criteria and compared favorably to other Federal agency's safety inspectors/investigators training programs.

OFFICE OF THE ADMINISTRATOR AND PUBLIC AFFAIRS POSITIONS

Question. Please prepare a table listing the average number of positions for the immediate Office of the Administrator and Office of Public Affairs for each of the last three years.

Answer.

Unit	Fiscal years—		
	1998	1999	2000
Office of the Administrator:			
Office of the Administrator	5	7	7
Office of the Deputy Administrator	3	3	4
Office of the Executive Director	8	8	7
Total Staff	16	18	18
Office of Public Affairs: Office Staff	7	10	10

ADMINISTRATIVE EXPENSES

Question. Please provide separate tables breaking down administrative expenses into PC&B, permanent change of station, travel, communication, information systems, training, ADP, non-mandatory awards, and other administrative categories for each of the last four years and the fiscal year 2001 budget request. Please present a table showing net administrative expenses for each of the last four years and the fiscal year 2001 budget request.

Answer.

LIMITATION ON ADMINISTRATIVE EXPENSES

	Fiscal years—				
	1997	1998	1999	2000	2001
Salaries & Benefits	$167,977	$174,369	$169,245	$193,939	$201,890
Performance Awards	891	996	1,020	1,117	1,158
PCS Moves	5,967	5,800	9,749	7,700	7,700
Travel	9,660	9,273	9,387	9,473	9,473
Transportation	548	556	1,506	663	465
Rental Payments to GSA	17,408	17,480	18,475	20,275	16,537
Other Rent & Comm. & Util	8,512	9,369	9,676	9,955	9,857
Printing & Graphics	3,072	[1] 89	2,607	1,609	1,512
ADP Services	15,356	16,615	17,005	16,800	19,200
Other Services	11,649	16,629	26,908	35,798	39,074
Supplies	3,181	2,079	2,973	2,079	2,021
Equipment	3,811	6,303	2,841	4,947	6,947
Totals	248,032	259,558	271,392	304,355	315,834

[1] Funding for Printing and Graphics are also captured in TASC with Other Services.

EDUCATIONAL AND TECHNOLOGY TRANSFERS

Question. For each of the last three years, please specify the amount spent on the promotion of educational or technology transfer activities in Russia, the Republic of South Africa, the Garrett-Morgan initiative, technology transfer to Turkey, a summer jobs program related to transportation, the support of possible careers in the transportation field, and environmental cleanup at any FHWA-related sites. What is the planned fiscal year 2001 level of expenditure for each of these activities?

Answer. FHWA funding for the Russia Program, South Africa Program, Turkish Program, and other programs are summarized in the chart below.

Country or region	Fiscal years—			
	1998	1999	2000	2001
South Africa	$220,000	$160,000	$150,000	$125,000
Russia	300,000	55,000	50,000	100,000
Turkey	.....	.....	10,000	35,000
Environmental clean-up of lab [1]	930,000	1,300,000	1,500,000	2,900,000
The Summer Transportation Internship Program for Diverse Groups (STIPDG)	85,780	415,000	700,000	850,000
National Summer Transportation Institute (NSTI)	500,000	1,356,000	2,000,000	2,000,000
Transportation and Technology Academy (TRANSTECH)	75,000	100,000	200,000	200,000
On-the-Job Training Support Services	8,239,775	5,350,278	5,710,000	7,960,287
National Urban Sustainable Employment in Transportation (NUSET)	15,000	.....	.....	.....
Garrett A. Morgan Technology Transportation Futures	44,688	24,050	24,050	20,000
Dwight David Eisenhower Fellowship	1,782,000	1,766,000	1,742,000	1,742,000
University Programs	3,000,000	22,590,648	23,734,750	23,734,750

[1] Includes partial funding from the General Services Administration (GSA) through a Memorandum of Understanding.
[2] Planned.
[3] Includes costs associated with closing FHWA's Moscow Office.

Question. Please indicate the exact source and amount of funding for each activity listed above and discuss how those expenditures affected the amount of funds available during fiscal year 1999 and fiscal year 2000 for research, development, or technology transfer programs that were justified in your budget requests.

Answer.

Country or region	Fiscal years—		
	1998	1999	2000
South Africa	International Outreach Program funds.	N/A	TEA–21 International Outreach Program funds.
Russia	International Outreach Program funds.	TEA–21 International Outreach Program funds.	TEA–21 International Outreach Program funds.
Turkey	N/A	N/A	TEA–21 International Outreach Program funds.
FHWA, CFLHD Groundwater & soil contamination clean-up.	G.O.E. Public Law 105–205 & project overhead charges.	G.O.E. Public Law 105–205 & project overhead charges.	G.O.E. Public Law 105–205 & project overhead charges.
On-the-Job Training Support Services.	23.USC. 140	23.USC. 140	23.USC. 140.
Garrett A. Morgan Technology Transportation Futures.	Limit. On General Operating Expense.	Limit. On General Operating Expense.	Limit. On General Operating Expense.
Dwight David Eisenhower Fellowship Program.	TEA–21, 5001(c)(3)(C)	TEA–21, 5001(c)(3)(C)	TEA–21, 5001(c)(3)(C).
University Programs	TEA–21, 5110	TEA–21, 5110	TEA–21, 5110.

These expenditures did not affect the amounts available for research, development, or technology transfer programs that were justified in the FHWA's budget request.

Question. Please indicate the amount of fiscal year 2001 funds requested for any of those activities.

Answer. FHWA funding for the Russia Program, South Africa Program and Turkish Program and other programs are summarized in the chart below.

Country or Region	*Fiscal year 2001*
South Africa	$125,000
Russia	100,000
Turkey	35,000

Country or Region	*Fiscal year 2001*
Environmental clean-up of lab [1]	2,900,000
The Summer Transportation Internship Program for Diverse Groups (STIPDG)	850,000
National Summer Transportation Institute (NSTI)	2,000,000
Transportation and Technology Academy (TRANSTECH)	200,000
On-the-Job Training Support Services	7,960,287
National Urban Sustainable Employment in Transportation (NUSET)	
Garrett A. Morgan Technology Transportation Futures	20,000
Dwight David Eisenhower Fellowship Program	1,742,000
University Programs	23,734,750

[1] Includes partial funding from the General Services Administration (GSA) through a Memorandum of Understanding.

NEW INITIATIVES

Question. During fiscal year 1999 or fiscal year 2000 were any funds taken away from any RD&T activity to pay for any expenses related to new initiatives that were not presented in the budget justification?

Answer. In fiscal year 2000, $331,000 R&T funds were used to support the new DOT Climate Change and Forecast Center which was not a part of the budget justification for that year.

CARRYOVER FUNDS

Question. Did you use any carryover funds to pay for shortfalls in the management and coordination area during either fiscal year 1999 or fiscal year 2000? If so, how much was allocated each year?

Answer. No carryover funds were used to pay for shortfalls in the management and coordination area during fiscal year 1999 or fiscal year 2000.

REVENUE ALIGNED BUDGET AUTHORITY (RABA) DISTRIBUTION

Question. For each of the contract programs specified in TEA–21, please prepare a table showing the amount of increase that would be provided under current law resulting from the RABA of TEA–21 as specified in Section 1105 and contrast that to the amount actually specified in TEA–21's contract authority amounts.

Answer.

TRANSPORTATION RESEARCH

[Fiscal year 2001]

Contract programs	TEA–21 authorization	RABA	Total
Surface Transportation Research	$98,000,000	$9,044,350	$107,044,350
Technology Deployment Program	45,000,000	4,153,018	49,153,018
Training and Education	18,000,000	1,661,207	19,661,207
Bureau of Transportation Statistics	31,000,000	2,860,968	33,860,968
ITS Standards	100,000,000	9,228,928	109,228,928
ITS Deployment	118,000,000	10,890,135	128,890,135
University Transportation Research	27,250,000	2,514,883	29,764,883

GENERAL OPERATING EXPENSES

Question. Please break out in detail your request for an additional $2.4 million for information technology. What is the analytical basis of this request? How much is in the base for similar investments? Are not computer costs continuing to decline per unit of information or processing capability? Why is this amount of an increase requested at this time?

Answer. The detail and basis for the expenditure is as follows:

Number of each	Total	Comment
1,000 PCs at $1,700	$1,700,000	Replaces ⅓ of agency PC's annually.
24 servers at $7,500	180,000	Replaces ⅓ of agency file & printer servers annually.
150 printers at $1,500	225,000	Replaces ¼ of agency networked printers annually.

Number of each	Total	Comment
12 networks at $25,000	300,000	Replaces ⅕ agency field network hardware.
Total	2,405,000	

Basis: (Support for Baseline End-User Computing in FHWA).
Line 1 3000 FTE (post-FMCSA separation); replacement cycle is 3 years.
Line 2 60 field offices with file/print servers (52 Divisions, 4 Resource Centers, 3 Federal Lands, LAST).
Line 3 one printer for 5 employees; replacement cycle 4 years.
Line 4 60 field office networks; replacement cycle 5 years.

As FHWA re-writes its major information systems it is moving them from a mainframe-based programming environment, to server-based systems accessed with a personal computer over a local or wide-area network. FHWA has not previously had a planned technology refresh rate for its desktop computing environment. As the desktops become part of the mission-critical support environment, they must be supported in a planned rather than an ad-hoc fashion.

FHWA has reduced its per-unit computer costs in-line with industry trends. Because FHWA bases its systems, which are used by States and other external partners as well as the agency's staff, as much as possible on commercial available off-the shelf software running on industry standard computers and operating systems, the selected refresh rate is necessary to maintain technology which is supported by the hardware and software vendors.

TRAINING INCREASE

Question. What is the analytical basis for the $4.33 million increase requested for training? How much is in the base for training already? Why is this amount of an increase requested at this time?

Answer. The budget includes an increase of $4,330,000 for training. The fiscal year 2000 budget base for the requested increase is $3 million dollars. The requested increase (which is not a one-time increase) represents the resources needed agency-wide to expand training and development in critical areas supporting FHWA's program delivery and deployment of technology. We must not only maintain and replace our current level of expertise, but build more depth in skills and expertise to meet our charge as a leader in transportation technology and program expertise. Following is a description of the training requirements which currently exist and which will be met through fiscal year 2001 and future budgets. We anticipate that future fiscal year budgets will reflect a comparable level of investment, as we hire and develop staff to meet program needs.

Using a variety of approaches, we aim to fully equip our employees with the skills and experiences needed to work effectively in new roles with the states and our other partners, to serve as a key resource for technical advice and expertise, and to effectively develop and deploy solutions to new and emerging transportation issues.

Our focus will be on developing our employees' skills in several key areas and on investing in developmental programs for long-term results. Included will be investments in technology-based learning mechanisms as one way to expand access and availability of training.

Technical expertise.—Covering a wide range of disciplines including safety, pavements, structures, planning, logistics, environment, and civil rights. Resources will go to such programs/initiatives as academic study in technical disciplines; technical training and expansion of rotational and developmental assignments for the gain of applied knowledge and experience by employees.

FHWA's business processes.—Providing training and development activities in agency systems and processes in areas such as strategic planning; budgeting and financial management, program performance management, continuous improvement and measurement; and information management.

Professionalism and related personal/interpersonal skills.—Addressing core employee skills needed by employees to effectively deliver program and technical expertise, including such areas as negotiation, mediation, communication, making effective presentations, and working collaboratively in our restructured organizational environment.

Leadership and management.—Continuing to provide skills training and development for a changing cadre of managers, supervisors and team leaders. As our current generation of leaders moves toward retirement, we need expanded resources to prepare a new generation to replace them. We also anticipate participating in new Department of Transportation-wide training initiatives as we seek to integrate a

broader Departmental perspective into our leadership and management development programs.

Succession planning/career development.—Addressing future staffing needs through implementing a redesigned career development/intern program (known as the Professional Development Program). Additional resources are needed to provide newly hired participants in this program with a strong foundation of FHWA program delivery and technical skills that will prepare them to quickly assume positions of responsibility in the FHWA organization.

DELTA INITIATIVE

Question. Please provide additional justification to further explain the request for $1 million for the Delta Initiative on page III–27. How did this request originate? Why can't the LTAP centers conduct some of these activities?

Answer. Some of the work to be supported by this funding is simply an increase in existing activities, e.g., developing training and technical assistance. Some of the work is new and directly transportation related, e.g., developing a regional transportation plan while some is less directly transportation related, e.g., developing a tourism marketing plan.

The request to fund these activities under one program came about based on the comments of members of delta region organizations and the public in general at meetings sponsored by the U.S. DOT. The U.S. DOT, in turn, acted as the lead agency on behalf of all cabinet members who were part of the executive branch Delta Initiative task force. The comments were, in part, informed by the historic role transportation has had in tourism and other aspects of the region. For example, Congress established the Great River Road program in 1973 based on a Mississippi River Parkway program funded under the Federal Aid Highway Act of 1954. During the administrative life of the Great River Road program (1973–1991), over a billion dollars in Federal, state and local funds were used for the Great River Road and various scenic overlooks, bike trails, historic preservation, parks and recreation trails.

QUESTIONS SUBMITTED TO THE NATIONAL RAILROAD PASSENGER CORPORATION

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

AMTRAK'S ROUTE SYSTEM

Question. Please provide the most recent route-by-route performance statistics for all short and long distance routes, similar to that found on pages 217–218 of Senate Hearing 106–221, the Senate Appropriations Committee's fiscal year 2000 hearing record.

Answer.

Financial and Statistical Performance of Amtrak Routes
(Financial Data Excluding Depreciation)
FY1999 vs. FY1998
(in millions)

Description	FY99 Total Revenue (in millions)	FY99 Total Expense (in millions)	FY99 Profit/(Loss) (in millions)	FY98 Profit/(Loss) (in millions)	P/L $ Change (in millions)	P/L % Change	FY99 Load Factor	FY98 Load Factor	Change in Load Factor	FY99 Ridership (in thousands)	FY98 Ridership (in thousands)	% Change in Ridership	FY99 Train Miles (in thousands)	FY98 Train Miles (in thousands)	% Change in Train Miles
Amtrak Intercity SBU															
Route 16 Silver Star	26.0	52.5	-26.5	-27.7	1.2	4%	49%	53%	-3%	259	263	-1%	1,031	1,040	-1%
Route 17 Three Rivers	23.1	44.3	-21.2	-17.5	-3.7	-21%	43%	48%	-5%	128	121	6%	662	667	-1%
Route 18 Cardinal	4.5	15.8	-11.3	-10.0	-1.3	-13%	48%	50%	-2%	80	86	-7%	285	289	-1%
Route 19 Silver Meteor	25.2	43.8	-18.6	-19.7	1.1	5%	51%	54%	-3%	249	249	0%	983	1,005	-2%
Route 25 Empire Builder	52.5	98.9	-46.3	-45.0	-1.3	-3%	58%	58%	0%	435	422	3%	1,874	1,879	0%
Route 26 Capitol Limited	19.0	40.0	-21.0	-18.7	-2.3	-12%	47%	55%	-7%	158	186	-15%	566	569	-1%
Route 27 California Zephyr	50.4	108.6	-58.2	-56.4	-1.8	-3%	51%	51%	0%	408	387	5%	1,770	1,763	0%
Route 28 Southwest Chief	61.1	111.7	-50.6	-37.7	-12.8	-34%	60%	65%	-5%	285	290	-1%	1,638	1,623	1%
Route 30 City of New Orleans	13.4	37.7	-24.3	-20.2	-4.1	-20%	44%	45%	-1%	192	198	-3%	683	681	0%
Route 32 Texas Eagle	16.5	48.7	-32.2	-23.9	-8.3	-35%	44%	53%	-9%	111	101	9%	578	527	10%
Route 33 Sunset Limited	17.3	52.6	-35.3	-29.3	-6.0	-21%	53%	57%	-4%	114	121	-6%	860	853	1%
Route 45 Lake Shore Limited	30.3	59.5	-29.2	-26.1	-3.2	-12%	56%	59%	-3%	321	334	-4%	835	843	-1%
Route 48 Silver Palm	27.0	49.8	-22.8	-23.6	0.8	4%	42%	44%	-2%	227	220	4%	1,034	1,061	-3%
Route 52 Crescent	26.6	57.7	-31.2	-28.9	-2.2	-8%	47%	50%	-3%	264	267	-1%	1,005	1,007	0%
Route 63 Auto Train	54.2	60.5	-6.3	-9.3	3.0	32%	55%	59%	-4%	237	244	-3%	610	620	-2%
Amtrak Intercity Long Distance	**447.0**	**882.1**	**-435.0**	**-394.2**	**-40.9**	**-10%**	**52%**	**55%**	**-3%**	**3,469**	**3,488**	**-1%**	**14,415**	**14,429**	**0%**
Route 20 Chicago-St Louis	10.2	24.5	-14.2	-12.8	-1.5	-12%	42%	39%	3%	266	271	-2%	615	577	7%
Route 21 Hiawathas	11.7	22.6	-10.9	-12.6	1.6	13%	37%	36%	1%	413	406	2%	365	401	-9%
Route 22 Chicago-Pontiac	9.2	29.7	-20.6	-20.9	0.4	2%	39%	36%	3%	344	375	-8%	645	644	0%
Route 23 Illini	5.8	8.1	-2.4	-2.6	0.2	8%	36%	37%	-1%	100	102	-2%	224	225	0%
Route 24 Illinois Zephyr	4.8	8.0	-3.1	-3.5	0.4	12%	35%	33%	1%	94	96	-2%	188	190	-1%
Route 29 Heartland Flyer	2.1	1.2	0.9	0.0	0.9	n/a	47%	n/a	n/a	27	n/a	n/a	45	n/a	n/a
Route 41 International	4.6	9.3	-4.6	-4.6	-0.1	-1%	24%	27%	-3%	114	115	-1%	231	233	-1%
Route 54 Chicago-Indianapolis	0.3	2.1	-1.7	-0.2	-1.5	-691%	38%	56%	-18%	13	4	211%	60	12	388%
Route 56 Kansas City-St Louis	9.1	11.5	-2.4	-5.6	3.2	57%	30%	35%	-5%	175	179	-2%	410	410	0%
Route 57 Pennsylvanian	4.9	18.4	-13.5	-7.2	-6.3	-87%	18%	28%	-10%	96	144	-34%	574	324	77%
Route 65 Pere Marquette	2.5	5.8	-3.2	-3.5	0.3	7%	38%	37%	1%	70	66	6%	127	129	-1%
Route 66 Carolinian	14.5	16.9	-2.4	-2.3	-0.1	-4%	39%	40%	-1%	232	233	0%	343	345	-1%
Route 67 Piedmont	4.7	5.5	-0.8	-0.3	-0.5	-138%	42%	41%	1%	53	48	11%	126	124	1%
Amtrak Intercity Medium Distance	**84.4**	**163.5**	**-79.1**	**-76.1**	**-3.0**	**-4%**	**34%**	**36%**	**-2%**	**1,996**	**2,041**	**-2%**	**3,953**	**3,612**	**9%**
Total Amtrak Intercity	**535.5**	**1048.3**	**-512.8**	**-468.6**	**-44.2**	**5%**	**49%**	**51%**	**-3%**	**5,489**	**5,582**	**-2%**	**18,427**	**18,110**	**2%**

Financial and Statistical Performance of Amtrak Routes
(Financial Data Excluding Depreciation)
FY1999 vs. FY1998
(in millions)

Description	FY99 Total Revenue (in millions)	FY99 Total Expense (in millions)	FY99 Profit/(Loss) (in millions)	FY98 Profit/(Loss) (in millions)	P/L $ Change (in millions)	P/L % Change	FY99 Load Factor	FY98 Load Factor	Change in Load Factor	FY99 Ridership (in thousands)	FY98 Ridership (in thousands)	% Change in Ridership	FY99 Train Miles (in thousands)	FY98 Train Miles (in thousands)	% Change in Train Miles
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Route 28 Southwest Chief	61.1	111.7	-50.6	-37.7	-12.8	-34%	60%	65%	-5%	285	290	-1%	1,638	1,623	1%
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FUNDING HISTORY AND AVAILABILITY

Question. Please prepare a table outlining federal funding to Amtrak for fiscal years 1998, 1999, 2000, and requested in fiscal year 2001. (Please include only the "glidepath" capital request for fiscal year 2001, and not the expanded intercity rail passenger service funding request from Revenue Aligned Budget Authority funds.) Please be sure to include funding made available by the Taxpayer Relief Act. Characterize the eligible uses for these funds, and display a column or row which shows how much of each year's funding is available for obligation in each fiscal year.

Answer.

[In millions of dollars]

	Fiscal years—			
	1998	1999	2000	2001
Federal grants:				
Operating grant	202	.....	.....	.....
Capital funding	.....	609	571	521
NECIP/NHRIP funding	250	.....	.....	.....
Taxpayer relief act	2,184	.....	.....	.....
Total Federal grants	2,636	609	571	521
Available for obligation:				
Operating grant	202	.....	.....	.....
Capital funding	.....	243	594	551
NECIP/NHRIP funding	250	.....	.....	.....
Taxpayer relief act	2,184	.....	.....	.....
Total available	2,636	243	594	551

MARKET BASED NETWORK ANALYSIS

Question. On February 28, 2000, Amtrak announced its comprehensive market based assessment of the railroad's route structure, which identifies opportunities for Amtrak to expand its national network and improve the use of its assets. Please outline what routing and service changes will be made by Amtrak during the next six months, before the end of fiscal year 2000. What are the major challenges to implementing each of these planned changes?

Answer. A chart indicating routes, approximate starting dates, equipment needs, freight partners that would be necessary and infrastructure needs is attached.

Train	Description of Activity	Implementation Date	Freight Partner(s)	Rolling Stock Needed	Infrastructure Requirements
Kentucky Cardinal	Extended Service to Louisville	Completed	L&I, CSX		
Crescent	Split Train in Meridian Mississippi to Dallas/Ft. Worth and New Orleans	Summer, 2000	KCS, UP, NS	2 L, 1 B, 2 SC, 1 D, 1 Dm, 1 SL S	Track Improvements
Chicago / Janesville, WI	New Train Between Chicago and Janesville	Summer, 2000	W&S, Metra, IMRL	2 C	Passenger Platform, Track Improvements
Detroit / Toledo	Reconfigures Train from Detroit to Toledo through Dearborn	Summer, 2000	NS		Track Improvements
New York / Chicago	Additional Trains	Summer, 2000	NS	12 C, 1 E-60, 6 L, 3 B, 9 SC, 3 C, 3 SLS	Roadrailer Ramps
Hiawatha	Extend Chicago to Milwaukee Train	Summer, 2000	WC, CP	4 CM	Track Improvements, Station Work
Texas Eagle	Daily Frequency Chicago to San Antonio	Summer, 2000	UP, BNSF	3 L, 2 D, 3 C, 2 B, 2 SC, 1 SLL	
Silver Service (New England)	Extends Line from New York to Boston	Fall, 2000	CSX, MetroN, MBTA, Nec	2 L	

Train	Description of Activity	Implementation Date	Freight Partner(s)	Rolling Stock Needed	Infrastructure Requirements
Monterrey, Mexico/San Antonio	Daily Frequency, Links to Chicago and elsewhere	Winter, 2001	UP, TFM	2 L, 4C	Some New Facilities
International	Reroute Between Battle Creek, Michigan and Canadian Destinations	Fall, 2000	VIA Rail, CP/CN, CS, NS, CSX		Some Additional Facilities
Twilight Limited (New York to Chicago)	Extends Train through Canada and Dearborn, Michigan	Fall, 2000	NS, CSX, CN or CS, CN?CP, VIA Rail	4 L, 3 B, 3 SC, 1 C, 3 SL S	
Transcon	Luxury Service	Fall, 2000	NS or CSX, BNSF	1 L, 20 D	
Chicago / Des Moines	New Passenger Service	Fall, 2000	Metra, I&M, Iowa Int.	2 L, 2 SC	
Silver Service (Florida)	Split Train in Jacksonville to Tourist Destinations and Miami	Fall, 2000	CSX, FEC	5 SC, 4 SL S	
Texas Eagle / Sunset Limited	Reroute Sunset via Ft. Worth and El Paso	Fall, 2001	UP, CSX, BNSF		

Rolling Stock Key: L, Locomotive; D, Diesel; SC, SuperLiner Coach; SL S, SuperLiner Sleeper; C, Coach Car; B, Baggage Car; SLL, SuperLiner Lounge; D, Dining Car; Dm, Dorm Car.

Question. Please outline what MBNA-based routing and service changes will be made by Amtrak during fiscal year 2001. What are the major challenges to implementing each of these planned changes?

Answer. Amtrak is in the process of analyzing additional routes and re-examining existing routes. The MBNA analytical process is a complex one requiring significant inputs from most every Amtrak business unit and department. Moreover, it is a dynamic process with continuous analysis of alternative network configurations and schedules. Later in this calendar year Amtrak anticipates announcing High Speed Rail Corridors for further discussion with appropriate governments, rail companies and other agencies. These routes will have been examined via the MBNA analytical process. Also later in the year Amtrak will announce additional traditional route additions and changes under the Network Growth Strategy initiatives. Thus, at this time there are no specific additional routing or service changes other than those indicated in the table provided for in the previous question.

HIGH SPEED RAIL CORRIDORS

Question. Please update the Committee on all proposed regional high-speed rail corridors which Amtrak is supporting through Strategic Business Plan or Market Based Network Analysis actions. Please provide detailed information on each proposed corridor, including: (1) total projected cost for each corridor, as well as anticipated timeframe; (2) the amount of capital funding committed by Amtrak, the affected States, the freight railroads and other interested parties; (3) the level of current services and what service improvements the high-speed corridor will bring about; (4) each project's primary proponent, as well as other parties in the coalition of forces; and (5) current ridership figures, and estimated ridership growth.

Answer. Attached is a summary prepared by Amtrak that describes the high-speed rail efforts current underway around the country. The following chart addresses costs that have been identified by state studies for these projects and funding commitments:

[In millions of dollars]

Corridor program	Long-term cost	Amtrak commitment	State commitments
Empire Corridor	500	85	85
Keystone Corridor	500	75	75
Southeast HSR:			
WAS-Charlotte	[1] 1.2	75	130
Charlotte-Atlanta	TBD	.....	.....
Midwest Regional Rail	[1] 5	25	140
California	[1] 5	25	[2] 700
Cascades	[1] 1.8	35	60

[1] In billions of dollars.
[2] Proposed by Governor Gray Davis.

The BNSF Railroad has invested some $15 million to improve infrastructure for the Cascades services. CSX has committed to some $35 million for improvements between Washington and Richmond. Discussions with freight railroads are on going with respect to partnering to improve the high-speed rail corridors.

Question. An option that has been discussed for Amtrak operations both "on and off" the Northeast Corridor is the use of dual-powered locomotives that can operate under electric catenary as well as with fossil fuel, thus avoiding the need for an engine change when moving from electrified to non-electrified right-of-way. On which Amtrak routes would the use of dual-powered locomotives be appropriate? Is this option being considered on all these routes? Is there currently a dual-powered locomotive in revenue service? If so, who is the manufacturer, and where is this type of power car in service?

Answer. Amtrak did purchase several P–32 DM locomotives from General Electric. These are used exclusively in service along the Empire Corridor where electric power is transmitted through a third rail and not by overhead catenary.

With completion of the New Haven-Boston electrification system, Amtrak no longer requires a change of engines in New Haven for its Northeast Corridor trains. However, the railroad is not electrified south of Washington to Richmond and Charlotte, north from New Haven to Springfield, or north of New York to Albany. As

a result, passengers either must change trains at these locations or await time-consuming locomotive changes.

Amtrak is considering options for avoiding the need for these delays, particularly for service between Charlotte/Richmond and Washington. Options include:

—development of a dual-power locomotive that can operate under electric catenary or fossil-fuel generated power;

—operation of trains with both an electric and a fossil fuel locomotive;

—addition of an electric power unit to fossil-fuel trainsets arriving in Washington from the south.

Amtrak expects to develop a specification for a dual power locomotive this year for review by potential vendors. A decision on which approach to pursue for these trains would follow.

NORTHEAST CORRIDOR OPERATIONAL AND SAFETY QUESTIONS

Question. Please provide historical data from fiscal years 1991 through 1999 on trespasser and crossing fatalities on the Northeast Corridor.

Answer.

STATE	FY91		FY92		FY93		FY94		FY95		FY96		FY97		FY98		FY99	
	TF	GCF	TF	GCF	TF	GCF	TF	GCF	TF	GCF	TF	GCF	TF	GCF	TF	GCF	TF	GCF
CT	0	0	1	0	3	1	2	0	4	0	3	0	2	0	1	0	7	0
DC	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DE	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MA	2	0	1	0	1	0	2	0	2	0	1	0	3	0	2	0	3	0
MD	1	0	0	0	4	0	1	0	1	0	4	0	0	0	2	0	2	0
ME	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NJ	4	0	1	0	0	0	5	1	2	0	0	0	2	0	1	0	1	0
NY	5	2	6	0	5	0	5	3	5	1	4	0	3	3	13	0	4	0
PA	8	0	3	0	0	0	3	0	2	0	4	0	1	0	4	1	3	0
RI	0	0	0	0	0	0	0	0	0	0	1	0	3	0	3	0	0	0
VT	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0
TOTAL	22	2	13	2	13	1	18	4	16	1	17	0	14	3	26	1	21	0

Note: TF = FRA Class "E" Trespasser Fatalities

Note: GCF = All FRA Class of Persons Involved in Grade Crossing Accidents that Resulted in a Fatality

Question. Please describe the efforts Amtrak is making to educate the public concerning the north end electrification project. Since Amtrak inaugurated electrical service on the North End of the corridor on January 31, 2000, have there been any accidents or fatalities related to electrification?

Answer. Amtrak has two structured outreach programs, one for school children and one geared toward emergency responders such as fire, rescue and police. The following is a numerical summary of our efforts in public education concerning the electrification and high speed rail operations.

NUMBER OF SCHOOLS/PRESENTATIONS—1998–99

	Schools	Presentations
MA	39	94
RI	94	246
CT	34	76
Total	167	416

These presentations are conducted primarily by Amtrak Police Officers, are on going, and closely follow the guidelines of the Operation Lifesaver training course.

SAFETY AND SECURITY TRAINING FOR FIRE, RESCUE AND POLICE—SINCE MARCH 2, 1999

	Classes	Attendees on record
MA	91	778
RI	58	874
CT	131	1,368
Total	280	3,020

Other than a few remaining classes to be conducted west of New Haven, training is now complete in these states. In fact, the program is continuing south, down the Northeast Corridor to Washington, D. C. To date, we have trained over 9,836 participants in 539 classes. This project is unprecedented in it's magnitude and scope. We will soon follow up on this work with a video that is being made to supplement our training classes.

In addition to the four-hour classroom training, Amtrak purchased and sent copies of OREIS Emergency Responder Software, developed by Operation Respond, to one hundred and twenty "911"-type dispatch centers in the Northeast Corridor effectively blanketing our railroad territory with this responder tool.

Besides these two major outreach programs, Amtrak has also participated in Another forty-three Community Outreach Programs involving displays and public events.

Finally, Amtrak developed and closely follow a detailed notification process to both internal and external parties prior to energizing any section of new catenary on the north end project. In addition to verifying full compliance with the National Electric Code, this final sign-off process ensures that notification to affected employees, contractors, sub-contractors, adjacent utilities, communities and emergency services occurs.

There have been no accidents or fatalities related to the electrification project since the first section of catenary was energized.

Question. Please describe the conversion to electrified service on the North End of the corridor. Provide a schedule of electrified locomotive integration, and milestones for the conversion process through full implementation. What are the associated time savings for electrified North End service (both for Acela Regional and Acela Express)? What are the top running speeds for both services on the South End and on the North End.

Answer. The remaining North End trains will be converted to electric service as high horsepower locomotives are accepted. The Consortium's estimate for the delivery of trainsets is as follows:

Trainset 1—July 2000; Trainset 20—March 2001; and Delivery rate is 2 to 3 trainsets per month.

Locomotive schedule: Locomotive 1—May 2000; Locomotive 15—October 2000; and Delivery rate is 2 or 4 locomotives per month.

Acela Regional will save one to one and a half hours from the previous multiple stop diesel service. The Acela Express is planned to save approximately just under another hour. The top running speed for Acela Express will be 150 mph on the North End. The top speeds on the South End will be 135 mph. The top running speed for Regional Service is 125 mph.

Question. Amtrak is the lead contractor for construction of the "third track" freight rail line paralleling the Northeast Corridor between Quonset Point/Davisville and Central Falls, Rhode Island. In last year's hearing record, Amtrak testified that the completion date for the third track, as determined by the Rhode Island Department of Transportation, is the last quarter of fiscal year 2001; Amtrak was in the process of reviewing that schedule. Is this construction project on schedule to be completed sometime in July-September, 2001? Has a site been selected for the location of the Warwick Train Station at T.F. Green Airport?

Answer. The Freight Rail Improvement Project (FRIP), or "third track", will not be completed in 2001. Beginning in July of 1999, the Rhode Island Department of Transportation (RIDOT) began a value engineering effort on the FRIP, which revisited many of the basic premises and criteria associated with the project. Amtrak worked closely with the State in this process, and as a result of that effort, RIDOT has decided to focus on the Track 3 (milepost 168 to milepost 184) portion of the project. In April, Amtrak will begin the mainline track undercutting necessary to accommodate tri-level and double stack clearances. RIDOT is continuing their design efforts in the Track 3 segment, however these efforts are primarily related to

bridge modifications required for the project. In the Track 7 portion of the project (milepost 184 to milepost 190), although Amtrak has completed the 90 percent design, RIDOT has requested a suspension of all work while they review options relating to the scope of work. Based on the above, RIDOT has established summer of 2002 as the in-service date for this project.

The Warwick Train Station at T.F. Green will be located at approximately milepost 176.5, which is west of Coronado Road.

NORTHEAST CORRIDOR ELECTRIFICATION AND HIGH-SPEED RAIL TRAINSET PROCUREMENT

Question. Due to findings of excessive wheel wear and a slower trainset testing schedule than originally envisioned by Amtrak, the Acela Express high-speed service, originally scheduled to begin by the end of the calendar year 1999, has been delayed until July 2000, a delay of more than six months. What is the adjusted timetable for the delivery of Amtrak's 20 new high-speed rail trainsets and 15 new electric locomotives? What is Amtrak's payment schedule for this procurement?

Answer. The Consortium's estimate for the delivery of trainsets is as follows:

Trainset 1—July 2000; Trainset 20—March 2001; and Delivery rate is 2 to 3 trainsets per month.

Locomotive schedule: Locomotive 1—May 2000; Locomotive 15—October 2000; and Delivery rate is 2 or 4 locomotives per month.

Payment will be made as each unit is accepted.

Question. What are Amtrak's remaining challenges to meeting the new start-up date of July 2000? Will the railroad meet this delayed implementation schedule?

Answer. The primary focus is to successfully complete the required qualification tests necessary to start the service on the NEC. The Consortium is projecting that they will meet this schedule.

Question. Please update the Committee on the trainset testing. Is all TTC-based testing completed? What on-corridor testing remains to be done? Please prepare a table comparing the original trainset testing schedule with the revised schedule, specifying detailed testing benchmarks.

Answer. All scheduled TTC testing is complete. The remaining on-corridor testing is primarily propulsion qualification testing, brake qualification testing, high-speed stability testing and the shakedown testing (60,000 mile test). There is other testing scheduled but propulsion, braking, high-speed stability and shakedown are on the critical path.

The schedule comparison between the contract and current schedule:

	Contract		Consortium's revised schedule	
	Start	Finish	Start	Finish
Engineering and Qualification Tests	7/10/99	9/27/99	5/28/99	8/10/00
Shakedown (60,000 mile test)	8/28/99	1/24/00	3/2/00	6/28/00

Qualification testing required to start revenue service will be completed by early July 2000. Qualification testing for operating a double trainset will be completed by August 10, 2000. This testing is not required to be completed for the start of revenue service since Amtrak's current operating plan does not include operating a double trainset.

Question. Is testing of the North End electrification complete? Do any segments of the total electrification project remain incomplete? If so, where are these segments and what is the timetable for their completion, testing, and integration into revenue service?

Answer. The following segments of the total electrification project remain incomplete:

Mainline Track 2 between View and Shaw's Cove Interlocks.—Completion of testing and energization of this segment in the New London West electrical section is scheduled for June 2000.

Mainline Track 2 from Cranston Interlock to Norton Switching Station.—Completion of testing and energization of this segment in the Warwick East electrical section is scheduled for May 2000.

Mainline Track 2 from Norton Switching Station to Sharon Substation.—Energization of this segment in the Sharon West electrical section is complete, but testing with AEM–7 locomotives prior to revenue service is scheduled for May 2000 after the energization of the Warwick East electrical section.

Mainline Track 2 from Sharon Substation to Transfer Interlock.—Completion of testing and energization of this segment in the Sharon East electrical section is scheduled for June 2000.

Crossovers between Mainline Tracks 1 and 2 at Plains and Cove Interlocks.—Completion of this segment in the Sharon East electrical section is scheduled for July 2000.

Incomplete items in the Boston Terminal Area (BTA) are as follows:

—Station Tracks 1–6 and 11–13.

—Track B5 between Cove and Tower 1 Interlocks (Block 25).

—Tracks D1, D2 12, 14 and 19 (Block 26).

—Wet and Dry Loop Tracks (Block 27).

— Southampton Yard Tracks (Block 28).

Substantial completion of testing and energization of the above items in the Boston Terminal area is scheduled for June 2000.

Question. Is testing of the track and other on-the-ground infrastructure on the North End complete? What is a "CPM schedule?"

Answer. Testing of the track for high-speed operation began in January 2000 and occurs thereafter on a routine basis as mandated by existing FRA regulations (49 CFR Part 213, Subparts A–G). Additional track testing, "GRMS" (gauge restraint measurement system) has begun and will be completed in the near future.

Signal testing of new/rehabilitated interlockings and other signal improvements is an integral part of the initial installations and occurs thereafter on a routine basis as mandated by existing FRA regulations (49 CFR Part 236). A "Critical Path Method" schedule calculates a single, early and late start and finish date for each activity based on specified, sequential network logic and a single duration estimate. The focus of CPM is on calculating float in order to determine which activities have the least scheduling flexibility.

In summary, a CPM schedule determines the longest path through the project, which is also the shortest time required to complete the project

Question. Please list all non-Amtrak railroads or commuter agencies that will need to be equipped with ACSES civil speed enforcement under FRA's mandate. Who is responsible for paying for the installment of these systems? Please describe any cost-sharing or reimbursement agreements.

Answer. The testing requirements are: On board installation and verification; Wayside installation and verification; Proof of Design Test Program and Commissioning for revenue operation; and Regular Testing and Inspection.

A copy of the "AMTRAK TEST PLAN FOR ACSES" is attached. The ACSES system must be operational and testing results must be approved by the Federal Railroad Administration prior to implementation of high-speed rail service. Eighty five percent (85 percent) of the wayside transponders have been installed along the tracks.

ACSES ON-BOARD INSTALLATION AND VERIFICATION

On board installation and verification will be divided into two phases. Phase I will be to install the complete ACSES hardware less the cardfile. Phase 2 will be to install the cardfile and initialize the system.

Manufacturer of the ACSES equipment will document testing of components and assemblies with serial numbers of each item shipped for installation.

Phase I will consist of installation of the main ACSES box including all the internal power supplies, ACSES antenna, CTV junction box, speed sensors, aspect display unit, air brake manifold, MCP radio, MCP antenna, audible alarm, acknowledgement push button, stop bypass button, and all the necessary pneumatic and electrical connections.

Installation document will include locomotive number, serial numbers of each of the major components, location and date installation completed.

Upon completion of the enclosure installation and before plugging the cardfile, all wires will be verified for continuity, and grounds. A special test box (designed for this application) will be used to verify power supplies, wiring and cable termination. Operation of the pneumatic magnet valve, suppression pressure switches, and cut-in and cut-out functions will be verified. This will be documented and records will be kept at the location where locomotive installation is taking place.

Phase 2 will require a laptop loaded with ACSES setup software to initialize the system. Upon installation of the cardfile, setup software will allow input of unit number, wheel diameter, speed sensor type(s) and train type(s). ACSES self-tester will be then activated to verify the internal and external system operation. This will include verification of the software version, antenna and speed sensor checks. Mag-

net valve operation, all the indications on the ACSES aspect display unit, and alarm condition.

Records of these tests will be kept at the locations where locomotives are undergoing modification. Upon completion of the above tests, locomotive will be ready for revenue service.

Records of the Phase 1 and Phase 2 testing will be kept at the designated Amtrak location.

ACSES WAYSIDE INSTALLATION AND VERIFICATION

Wayside installation and verification will be divided into two phases. Phase I will be to install the transponders in the track structure, insert the plugs and verify the messages. Phase 2 will be to install the MCP data radios at the interlocking central instrument houses, wire in the encoders and verify the data radio messages.

Manufacturer of the ACSES system will design and document the transponder layouts, the message structures to be contained in each plug, the wiring of the encoders, and the format structure contained in the data radio messages.

Phase I will be divided into two parts.

Part I involves installation of the transponders at correct locations and will require detailed transponder layouts from the manufacturer. These will be prepared by the manufacturer from the detailed layout engineering which determines deceleration curves by train type, considering maximum authorized speeds, grades, interlocking signal location, and location of the "hs", "ds", "pds", and other intermediate transponder sets on each track. Amtrak Standard Plans will be also prepared to insure proper location of the transponders within each set. These plans show the correct distances between the individual transponders in a set and between the first transponder in the set and the nearest insulated joints, as recommended by the manufacturer.

Amtrak C&S employees will install the transponders according to the detailed transponder layouts from the manufacturer and the Amtrak Standard Plans. These documents will also be used to verify that the installed locations of all transponders are correct.

Part 2 involves the insertion of the programmed plugs into the transponders and verification of the messages on each transponder. A programming tool is used to:

—Enter all pertinent transponder information from the detailed transponder layouts provided in Part I (Railroad, line, M.P. location in feet, track number, position within the set, linkage distance to next transponder set in feet, etc.).
—Enter appropriate revision letter.
—Enter packages using pop down menus.
—Verify information.
—Compile plug information.
—Print transponder content.
—Print special plug label in indelible ink.
—Print hexadecimal bitmap for the transponder plug.

Programming of transponder plugs will be performed only by qualified employees under the direct supervision of the Amtrak C&S Design office in Philadelphia, PA, or by qualified employees of the supplier. All documentation of individual transponder information, bitmaps, and detailed engineered transponder layouts will be kept in the Amtrak C&S Design office in Philadelphia, with copies to the appropriate Division supervision and field personnel, as required.

Amtrak C&S employees will insert each plug into its appropriate transponder, using the printed label on the plug to insure that each transponder receives the correct plug. Each installation is then verified at the site with the Transponder Reader. As each plug is inserted, the Transponder Reader is placed on the transponder and the bitmap, printed for that transponder is compared with the bitmap displayed on the Transponder Reader screen, character by character. If all hexadecimal characters on the Reader screen match the printed bitmap for the transponder, the plug is the correct one for that transponder. When all the transponders in a set have been verified to contain the required message information, the required documentation is signed off by the responsible C&S employee in accordance with AMT–27, Test 28B.

Phase 2 will also be divided into two parts.

Part I involves radio coverage tests by Amtrak's Radio Department to determine optimum antenna location and height to develop adequate MCP data radio coverage throughout each interlocking area, out to the distant signals approaching each interlocking. MCP data radios and antennas are installed and signal strength throughout the coverage area is verified to be adequate for reliable data message exchange between train and wayside.

Part 2 involves installation and wiring of the Encoders at each interlocking. Wiring of the Encoders will be verified by traditional C&S point-checking from detailed signal circuit wiring plans prepared by Amtrak from information furnished by the Manufacturer. Actual vital messages to approaching trains via data radio will be in the same formats as messages read from the transponders. A method to verify radio messages similar to the method used to verify transponder messages is to be developed and furnished by the manufacturer.

Records of these tests will be kept at the same locations on each Division as all other AMT–27 Test Records, and will become part of Amtrak's over-all C&S Test Documentation Files.

PROOF OF DESIGN TEST PROGRAM AND COMMISSIONING ACSES FOR REVENUE OPERATION

Following is the procedure to fully implement the ACSES as per FRA final order of particular applicability.

Testing and implementation are divided into two phases. Phase I will prove design parameters and the test program. Phase 2 will be commissioning of ACSES for revenue service.

Phase I will be divided into three parts.

Part I will be initial testing to verify the design concepts. This will be done at AAR Pueblo test track.

Following parameters will be tested:

—Relationship between antenna and transponder at different heights and power levels
—Consistency of reading transponder messages
—Transponder linking distances
—Enforcing civil speeds
—Running release
—Direction reversal
—Positive stop application without ATC
—Transponder plug programming tool

During the testing, the system will be demonstrated to Amtrak operating department for refining ACSES operating rules and planned training. FRA will be invited to receive initial comments.

Upon completion of these tests, modification will be made to the initial design. Any remaining message "packages" will be added for final design verification at the AAR test track. At this time ACSES will be installed on a High Speed, High Horsepower Locomotive. This will verify the wiring interface with the Cab signal system.

During this period, the system will be tested for functionality of all ACSES features.

As a minimum, proper execution of the following features will be verified:

—Train type dependent civil speed restrictions
—Enforcement of civil speeds for each train type
—Correct braking profile for initial speeds throughout the speed range and for various grade configurations
—Dirction reversal
—Transponder linking and missing transponder(s)
—Positive stop application with and without ATC
—Temporary speed restrictions with temporary transponders
—Miscellaneous packages to verify train operation during catenary phase break and voltage changes, and tilt enable and disable operation
—ACSES territory entrance/exit validation
—Validation of communication link (Lonworks) between HST and ACSES
—High Speed operation to validate correct reading of the transponders at maximum operating speeds

Test data will include:

—Name of the manufacturer
—Version number of the software
—Equipment in which software is installed
—Test location and date
—Test results and corrective action taken

Record of such test will be kept at the Amtrak designated Amtrak NEC headquarters.

Part 2 will be to test the system between County and Ham Interlocking in Amtrak NEC territory. One AEM–7 will be equipped with final version of ACSES. Wayside location will have all the transponders with proper messages necessary as per final design.

For the first two weeks, locomotive will be used in normal revenue service with ACSES pneumatic valve cutout. During this period every time the locomotive travels between County and Ham, the on board data logger will monitor transponder messages, and verify linking distances, civil speed restrictions, track numbers, and direction of travel. Information collected will be downloaded every third day and forwarded to the manufacturer for further analysis. Manufacturer will issue the final report of this testing within four weeks. On-board and/or wayside parameters will be changed accordingly to data collected.

Detail test plans will be used to verify proper execution of all the features, and sheets with the test results will be signed off and kept at designated Amtrak NEC headquarters.

Part 3 will be to validate the complete system using system simulator in the lab environment. The manufacturer will perform complete V. & V. FRA will then be given a demonstration and proof of testing at the manufacturer's designated location.

Phase 2 will be commissioning of ACSES between New Haven and Boston and designated four sections south of New York for revenue service. At this time new ACSES operating rules will be made effective. This will be contingent upon receipt of the final software for the On-Board Computer and completion of electrification and all the related track and signal work in that region.

Phase 2 is divided in to six parts scheduled to conform to other related activities in the NEC. These include the track and station improvements, electrification, signal work, availability of high-speed train sets, equipping MBTA control units, and training. This will allow the system to mature, gain operating experience, and make adjustment without going through major rework.

Testing and commissioning procedure will be same for all six parts.

Part 1: One AEM–7, one High Speed Train Set, one P. & W. RR diesel and one MBTA commuter car will be equipped with ACSES to verify all the speed restrictions, train types, and positive stop scenarios at all the interlocking home signals between New Haven, CT and Providence, RI.

Each train type will run at full track speed in each direction on Track I and Track 2. Also shorter portions of Track 3 and Track 4 will be run in each direction, so that all ACSES equipped main tracks will be tested in each direction with each train type. During these runs the ACSES pneumatic valve will be cut out. During each run, a qualified employee will determine that all permanent speed restrictions are being correctly displayed at the correct locations, checking these on test sheets. ACSES will monitor all the transponder messages and speed restrictions to verify the design parameters. Positive stop commands will be generated internally, and the location where each positive stop command occurs will be recorded to verify proper location and stop distances, but trains will not be brought to a stop. The "on-board" data logger will be used to gather all the data necessary to confirm all these functions following the test runs.

Proper braking distances for positive stop for example, will be confirmed by logging the points where ACSES first warns the engineer and then initiates the penalty approaching each interlocking home signal, while running at track speed. The location of the transponder set at the interlocking home signals will also be recorded; giving an accurate recorded distance between each ACSES calculated point of application and its corresponding stopping point. Following each test run, qualified employees will review each of these ACSES calculated braking distances to verify that each recorded braking distance is adequate to stop the train for the speed recorded at the application point. Proper braking distances for the civil speed reductions will also be reviewed to back-up the on-board test sheets, which were filled out while the test train was running at track speed.

The detailed test plan along with all test results will be kept at Amtrak NEC Engineering Headquarters in Philadelphia, PA. Final on board installation drawings will be kept at locomotive maintenance facilities. Transponder installation drawings will be retained with other signal plans at Amtrak NEC headquarters in Philadelphia, PA.

When all of the ACSES safety features have been validated, and all MBTA, CDOT, P. & W. RR, CSX RR and Amtrak ACSES equipped units are identified and verified with the final on-board software, ACSES will be placed in service with ACSES Operating Rules in service.

Part 2: Testing between Providence, RI and Boston, MA.; Part 3: Testing between County and Ham (New Brunswick, NJ to Trenton, NJ); Part 4: Testing between Ragan and Prince (Wilmington, DE to Perryville, MD); Part 5: Testing between Morris and Holmes (Morrisville, PA to Holmesburg, PA); Part 6: Testing between Grove and Landover (Odenton, MD to Landover, MD).

Test Procedure:

Test procedure will have following minimum guidelines.

Test records will indicate: Test date, Location, Locomotive number; Equipment in which software is installed; Name of the lead test engineer; System description; Test results; and Comments, which should indicate pass/fail criteria and any corrective action taken.

Test records will be kept at designated Amtrak location. Copy will be forwarded to FRA.

Test Schedule

Phase 1, Part 1.—November 1, 1998 to October 31, 1999. Location: TTCI (AAR) Test Center, Pueblo, Colorado. Tracks: Initially Transit Loop, later on High Speed Loop. Locomotive: Amtrak No. 199 with test car 10501 and HH locomotive 11.

Phase 1, Part 2.—July 26, 1999 to September 10, 1999. Location: "County" Intlg. (New Brunswick, NJ) to "Ham" Int1g. (Trenton, NJ). Tracks: No 2 and No.3 Main Tracks. Locomotive: Amtrak AEM–7 No. 906.

Phase 1, Part 3.—December 1, 1999 to February 29, 2000. Location: Simulator at PHW, Inc., Pittsburgh, PA. Tracks: All main tracks between New Haven and Boston, and tracks 2 and 3 between County and Ham will be simulated.

Phase 2, Part 1.—April 1, 2000 to May 31, 2000. Location: New haven, CT to Providence, RI. Tracks: All main tracks.

Phase 2, Part 2.—June 1, 2000 to August 31, 2000. Location: Providence, RI to Boston, MA. Tracks: All main tracks.

Phase 2, Part 3.—September 1, 2000 to September 30, 2000. Location: County, NJ to Ham, NJ. Tracks: No. 2 and No. 3 main tracks.

Note: Use of MCP for stop bypass, route dependency, and temporary speed restrictions will be activated in stages between October 1, 2000 and October 1, 2001.

Phase 2, Parts 4, 5, and 6.—Dates will be provided at later time.

REGULAR TESTING AND INSPECTION STANDARDS FOR ACSES

On-Board Equipment

Daily Test and Inspection.—Record the railroad (Amtrak), unit number, date, time, location, and type of test on the proper form; Visual inspection of the ACSES and MCP Radio antennas; Visual inspection of the speed sensor; Secure and record the seals on Pneumatic cut-out cock in cut-in position and ACSES cut-out switch in cut-in position; With the power on, observe that the ACSES cut-in light is lit on the ADU; Operate the self-test switch. (This will initiate the following series of steps); Step 1, Observe that each LED in ADU is illuminated; Step 2, ACSES antenna is powered; Step 3, ACSES magnet valve is de-energized; Audible alarm will sound; Push and release the acknowledge button; Reset the brakes by moving the brake handle to suppression; Step 4, ACSES will request PTS; This will cause the penalty application; Reset the brakes; This completes the self test and ADU will only show the current status; Record any corrective action; Inspection form to be signed by the qualified inspector performing this Daily Test and Inspection.

Periodic Test.—Every 92 days the ACSES event log should be downloaded to verify the ACSES activities.

Yearly Inspection and Test.—Verify the self tester operation as per manufacturer specification; Verify the Pass/Fail ACSES antenna strength; Sign off the proper form indicating the corrective action.

AMT-27, Test 28:

AMTRAK	C&S MANUAL AMT-27 Instructions for Testing Signal Apparatus and Signal Systems
TEST 28: ACSES TRANSPONDER AND ENCODER INSPECTION AND VERIFICATION	
LEVEL OF MANDATE: STANDARD	Regulating Docs: FRA Final Order of Particular Applicability; Federal Register/Vol. 63, No.140 / Wednesday, July 22, 1998 / Notices – Pages 39355-39357

Wayside equipment

AMT-27, Test 28:

AMTRAK	C&S MANUAL AMT-27 Instructions for Testing Signal Apparatus and Signal Systems
TEST 28: ACSES TRANSPONDER AND ENCODER INSPECTION AND VERIFICATION	
LEVEL OF MANDATE: STANDARD	Regulating Docs: FRA Final Order of Particular Applicability; Federal Register/Vol. 63, No.140 / Wednesday, July 22, 1998 / Notices – Pages 39355-39357

Purpose:

Test 28A.—To insure that ACSES transponders are in good condition for reading by ACSES—equipped trains.

Test 28B.—To insure that ACSES—equipped trains receive the correct messages at each transponder upon new installation, modification, or any disarrangement of a transponder that would require a new programmed plug or require changing the programmed plug.

Test 28C.—To insure that ACSES—equipped trains receive the correct messages from the encoder at each interlocking through the MCP data radio upon new installation, modification, or any disarrangement of the encoder, wiring of the encoder, wiring of the encoder, or software in the encoder or MCP data radio.

Responsibility:

Test 28A.—Maintainer C&S.

Tests 28B & 28C.—Foreman C&S, Inspector C&S, Assistant Inspector Test, Maintainer C&S Test, Signal Inspector or Maintainer C&S.

Records: Results of Test 28A shall be recorded on Form C&S 27. Results of Test 28B shall be recorded on Form C&S 27 in duplicate with one copy left in the house or case with the information sheet and hexadecimal bitmap for each transponder at that location, and a copy forwarded to the office of the Supervisor C&S. Results of Test 28C shall be recorded on Form C&S 27 in duplicate with one copy left in the house where the encoder is located with the information sheet and hexadecimal bitmap for each encoder at that location, and copy forwarded to the office of the Supervisor C&S.

Results: Any defects or discrepancies shall be noted on the test form and corrected immediately. If defects cannot be immediately corrected, the Supervisor C&S must be notified and arrangements must be made to make the corrections as soon as possible.

TEST 28A—ACSES TRANSPONDER INSPECTION

Frequency: At least once every three months.

Inspection Procedure: Inspect all transponders adjacent to an insulated joint location to insure they are operative and in good condition. If the perimeter of any transponder is damaged so as to not properly protect the imbedded antenna loop, the transponder must be replaced.

TEST 28B—ACSES TRANSPONDER PLUG VERIFICATION

Frequency: Before a new or modified transponder and/or plug is placed in service, or when a damaged transponder is replaced.

Procedure: 1. To insert a new or re-programmed plug into a transponder:

a. Examine the label to insure that the plug for the right Railroad, Line, Location, Track, Transponder Position within the Set, Version, and CRC Number.

b. When all of the above parameters have been verified, and with time on the track involved, insert the plug into the transponder.

c. Place the Transponder Reader on the center of the transponder. Compare the hexadecimal bitmap on the Transponder Reader screen with the printed bitmap furnished by the Amtrak C&S Design office, line by line and character by character.

d. If all characters read on the Transponder Reader screen match the corresponding characters on the bitmap furnished for the transponder, the plug is the correct one for that transponder.

e. When all plugs in all transponders in the set have been verified, the track may be placed in service. Record this test on Form C&S 27 as Test 28B.I.

f. If any character(s) in the bitmaps do not match properly, the plug must be immediately removed from the transponder.

2. To change out a single transponder:

a. Remove the transponder to be replaced from the track structure and place it alongside the transponder which is to replace it, in a location close to the track structure where it was located. Insure that the old and new transponders are carefully isolated from all other transponders throughout this process.

b. Immediately remove the plug from the old transponder. Examine the label to insure that the plug shows the correct Railroad, Line, Location, Track Transponder Position within the Set, Version and CRC Number. If these parameters are correct, immediately insert the plug into the new transponder. Care must be exercised that this plug is kept isolated from all other plugs throughout this process.

c. Immediately place the new transponder, with the original plug for that transponder location, attaching the transponder to the track structure at that location.

d. If a, b, and c have been completed in sequence, with the responsible employee in constant attendance and involved only in this process, the track may be returned to service. Record this process on Form C&S 27 as successful completion of Test 28.13.2 for the transponder changed out.

e. If any doubt arises during the changeout process concerning the correct handling of the plug, the transponder must be tested with the Transponder Reader before returning the track to service for ACSES—equipped trains. Test 28B. I must be followed and recorded on Form C&S 27.

TEST 28C—ACSES ENCODER AND MCP DATA RADIO VERIFICATION

Frequency: Before a new encoder/data radio package is placed in service, when an encoder, or a radio is changed out, or when any wiring to an encoder is changed.

Procedure:

1 . Examine the encoder, MCP data radio, antenna, coax cable and connectors to insure that all components of the system are in good operative condition.

2. Point check all wiring to the encoder to insure that all new or modified circuitry added to drive the encoder is installed exactly according to the authorized circuit plan.

3. Use the Data Radio Reader supplied by the manufacturer. Compare the hexadecimal bitmap displayed on the Data Radio Reader screen with the printed bitmap furnished for each aspect displayed on each signal at the interlocking being tested.

4. Line routes and shunt track circuits to display each signal aspect on each signal in the interlocking, comparing the bitmaps as outlined in 3 above. Record the results of the test on each signal on Form C&S 27.

Note: During the first two years of ACSES operation, the inspection and test results will be checked for any adjustments in the procedure or the frequencies.

Question. Please list all non-Amtrak railroads or commuter agencies that will need to be equipped with ACSES civil speed enforcement under FRA's mandate. Who is responsible for paying for the installment of these systems? Please describe any cost-sharing or reimbursement agreements.

Answer. The non-Amtrak railroads or commuter agencies that will have their locomotives equipped with the Advanced Civil Speed Enforcement System include the Massachusetts Bay Transportation Authority (MBTA), the Providence & Worcester Railroad Company (P&W), Connecticut DOT's Shoreline East service, and the CSX Transportation Company.

Amtrak is currently paying all costs associated with the installation of ACSES, at least at the outset. Amtrak believes the costs for ACSES should be paid by the federal government. The Federal Railroad Administration mandated the requirement for ACSES as a stipulation to allow operation of any passenger railroad trains in the New Haven to Boston territory where some trains would operate above 110 mph.

The costs for the infrastructure portion (or wayside) of the system were incorporated into the improvements to the north end infrastructure and paid by Amtrak. But the costs for computer control and telecommunications equipment on each train should be the responsibility of each operator using the Northeast Corridor.

In the interest of meeting the high-speed rail implementation schedules, Amtrak has been forced to fund the acquisition and installation of ACSES equipment for each operator listed above and to determine funding responsibility after the installation. Amtrak funded the installation of ACSES equipment on the High-speed trains sets and other Amtrak locomotives that will be providing Acela service.

Question. Does the trainset procurement delay have a domino effect on the implementation of high speed Acela services in fiscal year 2001, as well, because the trainset delivery schedule has been set back?

Answer. The implementation of service is driven by the contractor's delivery schedule, and yes, there is a "domino" effect. The Consortium's estimate for the delivery of trainsets is as follows: Trainset 1—July 2000; Trainset 20—March 2001; and Delivery rate is 2 to 3 trainsets per month.

Locomotive schedule: Locomotive 1—May 2000; Locomotive 15—October 2000; and Delivery rate is 2 or 4 locomotives per month.

Payment will be made as each unit is accepted.

Question. Last year, Amtrak testified that the budget result improvement in fiscal year 2000 due to implementation of high-speed service was projected to be $150,000,000. The fiscal year 2002 improvement was project to be $180,000,000. What are the financial effects of this delay on Amtrak's revenue projections for fiscal years 2000, 2001, and 2002?

Answer. Amtrak has identified the revenue impact in fiscal year 2000 to be $156 million. The full financial impact for fiscal year 2001 is currently being assessed and will be determined upon finalization of the Acela Express phase-in and operating plans.

We anticipate that fiscal year 2002 will be the first full year of high-speed rail service in the NEC. It is in this fiscal year that the implementation of high-speed rail results in an incremental bottom line improvement of $180 million. It is not expected that the delay continuing into 2001 will negatively impact fiscal year 2002, however this assumption will be further assessed in the upcoming budget cycle.

Question. How has the Corporation made up for the lost revenue due to the delay in implementing high-speed service in fiscal year 2000? How do you plan to make up for lost revenue due to the delay in 2001?

Answer. For Amtrak's fiscal year 2000, the passenger revenue shortfall resulting from the delay in the delivery of the new trainsets is estimated to be $156 million. The budget gap created by this revenue shortfall was resolved by identifying measures that offset this deficit and was incorporated as part of the company's business plan.

These items include revenues associated with liquidated damages to be paid to Amtrak by the consortium pursuant to the contractual agreement between the two parties and equipment leasing transactions. Interest expense savings stemming from the late delivery of the new trainsets and operating cost savings for Acela Express due to the later implementation of the service are also included.

Similar measures will be employed to offset revenue shortfalls occurring in fiscal year 2001.

Question. What percentage of the trainset costs are "Made in America?" Please break out material and labor?

Answer. Pursuant to its Agreements for the design and manufacture of high-speed trainsets and high-horsepower locomotives, the "United States Content" of the trainsets and locomotives is required to be at least 67 percent and 63 percent respectively. These requirements exceed significantly the statutory requirements of both Amtrak's Domestic Buying Preferences, 49 USC Section 24305(f) and the Buy American Act, 41 USC Section 10a–10c. Amtrak will conduct a post delivery audit to determine the actual percentage of the United States content of the equipment. Such an audit will include a breakdown of appropriate labor and material costs. Each Agreement carries penalties for non-compliance. Moreover, as required by law, final assembly of the trainsets and locomotives is being performed in the United States.

Question. Please outline the construction schedule and related costs for the three high-speed maintenance facilities. Please describe the cost-sharing arrangements for the construction and operation of these maintenance facilities with Bombardier.

Answer. Amtrak issued a partial substantial completion for the Ivy City and Southampton Facilities in February 2000. Amtrak will issue substantial completion for Ivy City when the consortium completes the Wheel Diagnostic, Trainset Washer and Split Rail Systems. The consortium expects the Wheel Diagnostic and Trainset Washer to be completed by the end of May 2000. The Split Rail System for is expected to be completed by June 15, 2000. Amtrak will issue substantial completion for Southampton when the consortium completes the Split Rail System, estimated to be early June 2000. The consortium expects to present the Sunnyside Facility to Amtrak for substantial completion in late May 2000.

The Maintenance Facilities cost $112 million. There are no cost sharing arrangements. Amtrak's contract with the Consortium is to design and construct the facilities. Amtrak's contract with the Consortium for Management Services requires the consortium to operate and maintain the Maintenance Facilities.

Question. Please describe the contractual penalty clauses that Bombardier is subject to regarding trainset delivery and maintenance. What level of recoveries have been made to date due to the delay in the trainset procurement? Given the current

rollout schedule, what total level of recoveries is Amtrak assuming in fiscal year 2000?

Answer. Amtrak's contract with the Bombardier-Alstom consortium for high-speed trainsets provides liquidated damages for late delivery. The relevant contractual provisions provide Amtrak with the right to obtain reimbursement or offset payments otherwise due the contractor with liquidated damages beginning at $1,000 per day for each day an individual trainset is delayed and escalating to $13,500 per day.

Amtrak's contract with Bombardier-Alstom for the management of maintenance services also contains various liquidated damages provisions relating to trainset availability, reliability, and performance. As service has not yet commenced, no liquidated damages have been incurred to date.

Question. Since Amtrak signed its procurement agreement with Bombardier in 1996, have any contract changes or change orders been made to the trainset and maintenance facility contract—either financial or technical in nature? Please describe these changes and when they were made.

Answer. In May of 1996, the original contract was signed for: 12 trainsets, 15 locomotives, 2 facilities.

September 1996—the Management Services option (trainset maintenance) portion of the Contract was exercised.

October 1997—an option was exercised for a facility at Sunnyside, NY, bringing the total to three.

December 1997—there was an interior change order adding the first class car, café car and the Acela image to the train interior and exterior.

March 1998—an option for six additional trainsets was exercised to bring the total number of trainsets on order to 18.

July 1998—an option for two additional trainsets was exercised, bringing the total number of trainsets to 20. The trainset simulator was upgraded to a full motion simulator.

The Trainset Contract had five minor change orders for the month of September 1997. These minor change orders consisted of items such as printer and refrigerator in the operating cabs and five pairs of coach seats for marketing purposes.

The Maintenance Facilities Contract had sixteen minor change orders from the period of July 1997 to November 1997. These minor change orders consisted of items such as the Split Rail System, Sanding System and Vacuum System.

There was one minor Maintenance Facility change order in July 1998 relating to the yardmaster office in Sunnyside.

There are several relatively minor changes under price negotiations.

SOUTH END CAPITAL NEEDS

Question. Please outline the Amtrak's Northeast Corridor South End short term plan (fiscal years 2001—2005) to address high priority rail infrastructure needs between New York and Washington, DC. Include a detailed cost sheet of major projects, sorted by benefit category (i.e., life safety/mandated, operational reliability, high-speed rail, shared benefit/capacity, and commuter/freight).

Answer. A copy of the South End Projects—Summary of Short Range Plan for fiscal years 2001–2005 is attached.

Appendix D - Summary

Draft in Development

Northeast Corridor Transportation Plan / NEC Five Year Plan

South End Projects - Summary of Short Range Plan (2001-2005)

($Millions)

Track Diagram Ref No.	Program	Total FY01-05
Strategic Category	**1. Life Safety / Mandatory**	
04.2	NY Tunnels Life Safety	278.1
21.5	B&P Tunnels - Life Safety Improvements	0.2
	Other South End Tunnels	5.9
	Structures - Miscellaneous Improvements	27.5
Subtotal	*1. Life Safety / Mandatory*	311.7
Strategic Category	**2. Operational Reliability**	
02.1	Sunnyside Yard - Sub 4 to Line 2 Connection	1.0
13.6	Richmond Frequency Converter	93.5
	Track	394.2
	Communications and Signals	145.1
	Electric Traction	136.7
	Structures	193.7
	Division Engineering	102.4
	Program Management	43.1
	Stations - Miscellaneous Improvements	24.6
	Sunnyside Yard Improvements	57.3
	Penn Coach Yard Improvments	25.1
	Washington Terminal / Ivy City Improvements	7.8
	Employee Welfare and Multi-Purpose Facility Improvements	19.0
Subtotal	*2. Operational Reliability*	1,243.2

Draft in Development

Northeast Corridor Transportation Plan / NEC Five Year Plan

South End Projects - Summary of Short Range Plan (2001-2005)

($Millions)

Track Diagram Ref No.	Program	Total FY01-05
Strategic Category		
3. High Speed Rail		
09.1	Dock West - Track Upgrade	2.0
11.1	County to Hamilton - Upgrade Tracks for 150 mph, Including Midway	53.0
12.1	Grundy - New High Speed Turnout	3.3
12.3	Morris to Holmes - Tracks 2 & 3 Except Through Interlockings - Upgrade to 135	21.1
13.2	Shore and North Philadelphia - Interlocking Replacement and Rationalization	61.0
16.1	Chester Viaduct and Bridges	8.0
16.2	Baldwin to Hook - Tracks 2 and 3, Concrete Ties	12.6
16.3	Phil to Hook - Tracks 2 and 3, Upgrade to 110 and 120 (Baldwin to Phil)	3.0
17.1	Ragan to Bacon - Speed Upgrade	46.9
18.1	Bacon to Prince - Upgrade Tracks 2 & 3	4.0
19.1	Susquehanna River Bridge - Preliminary Engineering and Design	10.0
19.2	Aberdeen Area Improvements - Formation Improvements and Oak Interlocking Elimination	6.4
19.3	Bush - High Speed Interlocking Improvements	6.8
19.4	Bush to Gunpow - Undercutting and Formation Improvement	9.6
20.1	Gunpow - High Speed Interlocking	10.3
21.1	Grove to Landover - Tracks 2 & 3 - 135 mph	20.2
21.3	B&P Tunnels - Replace Oilstatic Line	16.8
22.2	New Carrollton - Interlocking Improvements	3.6
22.3	Landover Interlocking Modernization	13.6
	Track and Curve Realignments	29.0
	Stations - High Speed Rail Improvements	47.6
	MofW Heavy Moveable Equipment	25.0

Draft in Development

Northeast Corridor Transportation Plan / NEC Five Year Plan

South End Projects - Summary of Short Range Plan (2001-2005)

($Millions)

Track Diagram Ref No.	Program	Total FY01-05
	Heavy Support Vehicles	20.0
	Fencing and Protective Barriers	24.0
Subtotal	*3. High Speed Rail*	457.9

Strategic Category

4. Shared Benefit Projects

04.1	Penn Station - "JO" Interlocking	11.0
09.2	Harrison - NJT Staging Yard	22.1
09.3	Portal Bridge Replacement - Alignment and Design Studies	3.0
09.4	Hudson - Interlocking Modernization	11.6
10.2	New Jersey Rail Configuration - Preliminary Engineering - Study of Configuration Options in New Jersey	2.0
13.1	Pennsylvania Rail Configuration - Preliminary Engineering - Study of Configuration Options in Pennsylvania	2.0
16.1	Chester Viaduct and Bridges	3.7
17.2	Delaware Rail Configuration - Preliminary Engineering to Support Long Term Passenger and Freight Needs	2.0
17.7	Newark Area Improvements - Interlocking Modernization and Concrete Tie	7.0
21.13	Bridge / Fulton - Short Term Improvements	9.8
21.14	Maryland Rail Configuration - Preliminary Engineering - Study of Configuration Options in Maryland	2.0
21.4	B&P Tunnels - Replacement Design	36.0
22.6	Avenue - Modernize Interlocking	6.0
	Ties	2.4
	Track Rehab	55.0
	Penn Station New York	35.2
	Farley Station Project	672.8
	Stations - Commuter / Capacity Improvements	64.0

Draft in Development

Northeast Corridor Transportation Plan / NEC Five Year Plan

South End Projects - Summary of Short Range Plan (2001-2005)

($Millions)

Track Diagram Ref No.	Program	Total FY01-05
	CETC	15.8
	MofW Heavy Moveable Equipment	3.5
	Engineering Planning, Design and Program Management	5.0
Subtotal	*4. Shared Benefit Projects*	971.8
Strategic Category	**5. Commuter/Freight Capacity**	
02.2	New York and Atlantic - Freight Connection	2.8
09.2	Harrison - NJT Staging Yard	6.9
13.3	Zoo - New Harrisburg / Highline Freight Connection	3.4
	Track Rehab	2.6
	Electric Traction - Miscellaneous	1.2
	Stations - Commuter / Capacity Improvements	53.8
	Stations - Miscellaneous Improvements	2.0
	Sunnyside Yard Improvements	5.0
	MofE Facilities, Fixed Machinery and Yard Improvements	128.0
Subtotal	*5. Commuter/Freight Capacity*	205.6
Report Total		3,190.2

Question. Amtrak had proposed paying 50 percent of the costs associated with these improvements, and having commuters and freights pay the other 50 percent. What has the reception been from the commuters and freights to this split cost proposal? Please describe any project cost agreements that are negotiated at this time.

Answer. There has been no response from the commuter railroads or the freight railroads regarding the proposed cost sharing proposals. A presentation of the South End report to all South End stakeholders is planned for May 17 to discuss the contents, assumptions and further development of a jointly funded capital investment program for the South End of the Northeast Corridor.

Amtrak's intent is to define a process and enter negotiations with each carrier to develop the scope, schedule, budget and funding share for the next five years (fiscal year 2001–2005) and the longer range as well. The requirement to perform safety/mandated and operational reliability is central to the adequate delivery of existing services that affect all operators on the Corridor and the funding responsibility for these investments must be shared. Further improvements to maximize the potential of the South End from a travel time and capacity viewpoint are also needed and should be apportioned among the operators generally in proportion to the relative benefits that result. A combined funding and development plan is required to respond to these challenges.

The report incorporates the infrastructure improvements needed to meet all operators' future needs-Amtrak, commuter railroads and freight railroads. The infrastructure improvements (additional tracks, new interlockings, improved switches, etc.) to accommodate future operating plans were shared with the stakeholders. But the costs and funding assumptions had not been shared with stakeholders as noted

in the report. The challenge is to develop a five-year funding plan that will ensure safe, quality service delivery as well as develop the plan for infrastructure improvements needed for the future. The South End Plan is the first step in this process and will be periodically updated as agreements are reached or priorities change.

CSX TRACK CONDITION

Question. What Amtrak routes operate over CSX-owned track? Has Amtrak experienced track condition-related delays or slower running times? What are the Corporation's alternatives for redress when the condition of non-Amtrak owned track causes delays or even derailments?

Answer. CSX owns all or a portion of the trackage on the following routes: Orlando—Los Angeles/Washington—Chicago via Pittsburgh/Washington—Chicago via Charleston/New York—Chicago/Boston—Chicago/Chicago—Jeffersonville/Sanford—Lorton/Boston—Newport News/New York—Charlotte/Boston—Richmond/Chicago—Grand Rapids/New York City—Niagara Falls/New York City—St. Albans/New York City—Rutland/Washington—Albany/Syracuse/Schenectady/Washington—Boston via Springfield.

Particularly since CSX's merger with Conrail, Amtrak trains regularly experience delays and slower running times which result in late trains.

When freight railroad delays cause late trains, the freight railroad foregoes incentive payments it would otherwise earn from Amtrak for good on-time performance. If a freight railroad's on-time performance falls below 70 percent on a route in a given month (as measured based on exclusion of certain delays not within the railroad's control), the railroad is penalized. For example, during February 2000, CSX did not earn any of the $1.65 million in on-time incentive payments it was eligible to earn, and was assessed penalties of $46,557. In addition, virtually all of the operating agreements that Amtrak has negotiated with freight railroads require the railroad to maintain the rail lines over which Amtrak's trains operate to a "level of utility" that will enable those trains to operate at specified speeds and schedules. The CSX Agreement has such a provision, with exceptions for several "low density" segments of CSX rail lines. If a railroad fails to maintain the required level of utility, Amtrak can initiate an arbitration proceeding to obtain an order requiring the railroad to restore its tracks to the contractually mandated level. Where appropriate, Amtrak can also ask the arbitrators to award damages.

CATERING CONTRACT

Question. It has been one year since Amtrak commissaries were turned over to Dobbs International Services, which has a seven-year contract with Amtrak to provide food and beverage labor and management services for all Amtrak-operated intercity trains. In last year's record testimony, Amtrak estimated a net savings ranging from $21,500,000 to $28,100,000 over the length of the contract. What level of savings has been realized in the first year of this contract? Are you on track to realize savings over the life of the contract within the range estimated in last year's testimony?

Answer. Of the $5.2 million net labor savings targeted in the first year of the contract, Amtrak has realized $2.548 million through February 2000. Amtrak is ahead of the projected annual savings of $5.21 million by $0.377 million year-to-date. There was an additional savings in fiscal year 1999 of $1.54 million as a result of funds budgeted but not spent for employee buyouts.

AMTRAK REVENUE SOURCES

Question. Please update the table on pages 225–226 of Senate hearing 106–221, showing the actual versus budgeted revenues for fiscal years 1998, 1999, and anticipated for 2000, including all revenue sources broken out by type.

Answer.

	1998		1999		2000	
	Actual	Budget	Actual	Budget	Forecast [1]	Budget
Core	$1,294	$1,331	$1,395	$1,438	$1,555	$1,718
Commuter	260	267	261	255	258	258
Reimbursable	91	90	94	106	91	93
Commercial	63	69	78	51	48	55

	1998		1999		2000	
	Actual	Budget	Actual	Budget	Forecast [1]	Budget
Total	1,708	1,757	1,828	1,850	1,952	2,124

[1] Source: Fiscal year 2000–2004 strategic business plan.

Question. Please update the table on page 226 of last year's hearing record that breaks out commuter service revenue by route location for fiscal years 1998, 1999, and anticipated for 2000.

Answer. The following schedule shows the breakout of commuter services revenues by SBU by commuter agency:

[In millions of dollars]

	Fiscal years		
	1998 Actual	1999 Actual	2000 Actual
Mass. Bay Transportation Authority (MBTA)	154	164	165
Connecticut Dept. of Transportation (CDOT)	5	6	5
Maryland Dept. of Transportation (MARC)	18	18	19
Virginia Railway Express (VRE)	8	10	11
Total NEC Commuter	186	198	200
Metrolink Commuter Rail Service	27	16	17
Caltrain Commuter Service	37	40	41
Coaster Commuter Service	7	7	7
Total West Commuter Service	71	83	65
Total Commuter Revenue	257	281	265

The figures for 1998 above do include the Florida Fun Train for which Amtrak earned $4 million in revenue in that year. The train service was terminated after that.

Question. Please update the table on pages 226–227 of last year's hearing record that lists the Corporation's rent and retail locations, amount of space, and associated income in fiscal years 1998, 1999, and projected for fiscal year 2000. Are all of Amtrak's commercial and retail development assets on the Northeast Corridor?

Answer.

AMTRAK NORTHEAST CORRIDOR COMMERCIAL DEVELOPMENT DEPARTMENT

[In thousands of dollars]

Revenue category	Fiscal year	
	1999 Actual	2000 Forecast [1]
Real Estate	[2] 2,536.4	[3] 1,800.0
Retail	[4] 7,952.5	[4] 7,700.0
Telephones	476.6	400.0
Pipe & Wire	3,609.0	3,900.0
Parking	4,150.9	4,000.0
Advertising	3,108.4	3,000.0
Telecommunications	[5] 25,463.0	[6] 19,200.0
Other	[7] 15,810.8	.....
Total	63,107.6	40,000.0

[1] Actuals through February and forecast March through September.
[2] Includes: $1,280.0 one-time revenue events (i.e. property sales).
[3] Includes: $575.0 one-time revenue events (i.e. property sales).
[4] Includes: All Amtrak owned NEC Stations.
[5] Includes: $4,800.0 flagging protection and $900.0 one-time payments.

[6] Includes: $1,250.0 flagging protection and $3,800.0 one-time payments.
[7] Includes: $14,100.0 Providence Sale, $1,300.0 MA Condemnation, $350.0 32nd Street Sale.

No. Amtrak does have commercial and retail development assets off of the Northeast Corridor.

Question. Please update the table on page 227 of last year's hearing record showing the actual and estimated income from express freight and mail service for fiscal years 1999 through 2002.

Answer. [Information follows]

[In Millions of dollars]

	Fiscal year			
	1999 [1]	2000	2001	2002
Mail	80.6	103.8	114.5	118.2
Express	17.2	72.2	78.0	99.5
Total	97.8	176.0	192.5	217.7

[1] Source: FIS

Question. For fiscal years 1998, 1999, and anticipated through 2000, please breakout the level of state support by State, with totals for each year.

Answer.

[In millions of dollars]

	Fiscal year		
	1998	1999	2000
Total operating subsidies from States	82.6	99.9	112.2
Total Capital subsidies from States	107.6	302.9	218.5
Grand total	190.2	402.8	330.7

AMTRAK CONTRACTS WITH FREIGHT RAILROADS

Question. Please describe all contracts between Amtrak and the freights wherein the Corporation makes payments on a contractual or incentive basis. Prepare a table that breaks out the types of payments and the amount paid, by freight railroad and total, for fiscal years 1997, 1998, and 1999, and projected for 2000.

Answer. Based upon 49 United States Code 24101, et. Seq. (the Rail Passenger Service Act, as amended) and as otherwise agreed by the parties, Amtrak's agreements with the freight railroads spell out both Amtrak's and the railroad's rights and obligations, provide for payment for the railroad's incremental costs, and includes an incentive provision to allow the railroads to earn payments above incremental costs for quality service measured by on-time performance. Payments for the fiscal years 1997, 1998, and 1999 and projected payments for 2000 are attached.

AMTRAK'S PAYMENTS TO RAILROADS [1]

[Fiscal year 1999]

	Cost reimbursement	Incentives earned	Total payment
Railroads with incentive contracts:			
BNSF	$16,190,206	$12,231,404	$28,421,610
CN—Grand Trunk	307,716	.....	307,716
CN—Illinois Central	2,452,508	1,118,038	3,570,546
CP—D&H	534,121	405,110	939,231
CP—Soo Line	1,407,621	722,232	2,129,853
CSX	13,520,071	3,002,421	16,522,492
FDOT	569,611	337,497	907,108
Metra	236,008	135,779	371,787

AMTRAK'S PAYMENTS TO RAILROADS [1]—Continued

[Fiscal year 1999]

	Cost reimbursement	Incentives earned	Total payment
Metro North	6,101,376	498,832	6,600,208
New England Central	873,514	361,856	1,235,370
Norfolk Southern	5,661,923	1,528,166	7,190,089
SCRRA—Los Angeles	1,187,242	983,049	2,170,291
Union Pacific System	13,835,954	2,446,428	16,282,382
Vermont Railway	136,587	7,933	144,520
Sub-Total	63,014,458	23,778,745	86,793,203
Railroads without Incentive Contracts:			
Chicago Union Station	8,058,629		8,058,629
CN—Canadian National	700,592		700,592
Kansas City Terminal	139,308		139,308
Minnesota Commercial	279,109		279,109
NCTD—San Diego	1,493,924		1,493,924
Portland Terminal RR	122,952		122,952
VIA Rail Canada	1,194,515		1,194,515
Sub-Total	11,989,029		11,989,029
All Railroads	75,003,487		98,782,232

[1] Based on todays railroads after mergers.

Question. Please update the information on page 232 of last year's hearing record describing all contracts between Amtrak and freight railroads wherein freights are given access to routes over Amtrak-owned tracks. What are the most recent payment levels from freight railroads?

Answer. Freight service is provided over the rail lines in the Northeast and Michigan that Amtrak acquired in connection with Conrail's formation in 1976 pursuant to trackage rights that were granted to freight railroads at the same time. Certain of these rights have subsequently been transferred to other railroads, most recently as a result of the division of Conrail's rights between Norfolk Southern and CSXT during 1999.

The terms of these rights are set forth in various agreements between Amtrak and the freight railroads. The compensation Amtrak receives under these agreements is for the most part based upon the number of car miles (one freight car travelling one mile) that the railroads operate over Amtrak-owned lines.

The following is a summary of the rights covered by these agreements. Certain of these rights, including all of Delaware & Hudson's rights, were not exercised during 1999.

—Norfolk Southern has rights between New York, NY, and Washington, DC; Philadelphia, PA, and Harrisburg, PA; and Kalamazoo, MI, and Michigan City, IN.

—CSXT has rights between New Rochelle, NY, and Washington, DC, and over certain trackage in Southern Connecticut.

—Conrail has retained rights to provide local service on behalf of Norfolk Southern and CSXT between Newark, NJ, and Philadelphia, PA.

—Delaware & Hudson Railway, a subsidiary of Canadian Pacific Railway, has rights between Perryville, MD, and Washington, DC, and over short track segments in New York, NY, Philadelphia, PA, and Harrisburg, PA.

—Springfield Terminal Railway, a subsidiary of Guilford Rail System, has rights between New Haven, CT, and Springfield, MA.

—Providence & Worcester Railroad has rights over certain Amtrak-owned lines in southern Connecticut, Rhode Island, and near New Rochelle, NY.

—Connecticut Southern Railroad has rights between New Haven, CT, and Springfield, MA.

Freight Railroad Payments for fiscal year 1999 Operations

Conrail	$11,180,222
Norfolk Southern	5,523,868

Freight Railroad Payments for fiscal year 1999 Operations—Continued

Connecticut Southern	1,285,378
CSXT	221,226
Providence & Worcester	167,509
Springfield Terminal	127,304
Total	18,505,507

Certain of the above payments have not yet been made, and the dollar amounts shown are subject to audit.

RIDERSHIP AND EMPLOYMENT BY STATE

Question. Please provide a breakdown of fiscal year 1999 Amtrak ridership by State, as well as the number of residents employed directly by Amtrak in each State.

Answer.

State	Boardings	Alightings	Total	Employees
Alabama	26,052	25,152	51,204	26
Arkansas	8,442	8,767	17,209	28
Arizona	45,023	46,177	91,200	23
California	3,258,809	3,248,256	6,507,065	3,490
Colorado	132,461	130,146	262,607	90
Connecticut	434,360	450,500	884,860	751
Washington, DC	1,576,025	1,594,735	3,170,760	343
Delaware	357,326	359,912	717,238	1,134
Florida	458,989	458,357	917,346	953
Georgia	73,518	74,675	148,193	69
Iowa	29,102	29,737	58,839	10
Idaho	2,190	2,158	4,348	1
Illinois	1,442,702	1,436,791	2,879,493	2,066
Indiana	55,507	59,688	115,195	1,232
Kansas	17,829	18,127	35,956	21
Kentucky	5,289	4,982	10,271	3
Louisiana	95,507	96,825	192,332	338
Massachusetts	589,063	563,646	1,152,709	2,299
Maryland	820,280	813,379	1,633,659	2,494
Maine				16
Michigan	293,593	292,166	585,759	155
Minnesota	78,264	79,604	157,868	77
Missouri	230,291	230,751	461,042	96
Mississippi	45,198	46,783	91,981	57
Montana	65,245	66,086	131,331	48
North Carolina	262,395	259,713	522,108	132
North Dakota	40,841	41,016	81,857	12
Nebraska	20,969	21,492	42,461	17
New Hampshire	888	933	1,821	166
New Jersey	1,747,445	1,750,297	3,497,742	1,724
New Mexico	51,807	51,304	103,111	62
Nevada	42,106	51,118	93,224	31
New York	4,709,895	4,687,881	9,397,776	2,064
Ohio	85,007	84,795	169,802	68
Oklahoma	14,601	13,816	28,417	3
Oregon	304,671	303,109	607,780	73
Pennsylvania	2,338,445	2,338,083	4,676,528	3,120
Rhode Island	181,274	188,963	370,237	399
South Carolina	91,800	90,929	182,729	53
Tennessee	22,220	22,335	44,555	14
Texas	84,718	83,463	168,181	180
Utah	16,694	17,871	34,565	45
Virginia	467,711	468,950	889,162	792

State	Boardings	Alightings	Total	Employees
Vermont	48,927	51,073	100,000	12
Washington	467,711	468,950	936,661	428
Wisconsin	250,670	250,011	500,681	79
West Virginia	18,479	19,859	38,338	32
United States Total	21,386,663	21,379,538	[1] 42,766,201	25,326

[1] The above figure represents total boardings and alightings in the United States. Since each trip contains two endpoints, total ridership is equal to half of total boardings and alightings.

STATION RENOVATION

Question. Please update the tables on pages 234 and 235 of last year's hearing record, providing data on station renovation costs for fiscal years 1999, 2000, and planned for fiscal year 2001.

Answer. [Information for fiscal years 1999 and 2000 is attached.] The fiscal year 2001 Capital Budget is currently under development and therefore no specific information relating to station renovation costs have been included.

FISCAL YEAR 2999 STATION RENOVATIONS

Station	Amtrak	Funding other	Total
King Street Station Intermodal Project	4,000,000	16,250,000	20,250,000
Minneapolis-St. Paul, MN	500,000	.....	500,000
Raleigh, North Carolina Station Expansion	444,000	.....	444,000
Chicago Union Station	5,519,000	.....	5,519,000
Southern Pines, NC Station Restoration	800,000	.....	800,000
Erie, PA Station Renovation	1,400,000	.....	1,400,000
NEC Station and Customer Service Impro	4,850,000	.....	4,850,000
Washington Union Station—Lower Level	.....	3,200,000	3,200,000
MetroPark Station	600,000	.....	600,000
Wilmington Station	3,000,000	1,900,000	4,900,000
Tukwila, WA Station	500,000	24,200,000	24,700,000
Everett, WA Intermodal Project	1,000,000	40,430,000	41,430,000
Eugene, OR Multimodal Station	500,000	3,600,000	4,100,000
Albany, OR Multimodal Station	500,000	11,000,000	11,500,000
San Diego Station Improvement	800,000	400,000	1,200,000
Salinas Station Improvement	300,000	2,979,000	3,279,000
Sacramento, CA Station Renovation	1,500,000	36,580,000	38,080,000
Great American Station Foundation	1,000,000	.....	1,000,000
Total Fiscal Year 1999 Station Renovations	27,213,000	140,539,000	167,752,000

FISCAL YEAR 2000 STATION RENOVATIONS

Station	Amtrak	Funding other	Total
Intercity Leveraged Station Projects	1,000,000	49,000	1,049,000
Minn-St. Paul Station Repairs	75,000	.....	75,000
Spartanburg, SC Station Improvements	35,000	565,000	600,000
Great American Station Foundation	950,000	.....	950,000
Northern Auto Train Terminal Replac	4,000,000	.....	4,000,000
Total Fiscal Year 2000 Station Renovations	6,060,000	614,000	6,674,000

FISCAL YEAR 2000 CAPITAL INVESTMENT

Question. The Federal Railroad Administration was appropriated $3,000,000 in fiscal year 2000 for the Michigan high-speed positive train control project (a joint FRA/Amtrak/Michigan DOT and Harmon Industries project). What level of funding

for this project is provided by each of the four partners for fiscal years 1999, 2000, and projected for 2001? Is the project on track for completion in May 2001?

Answer. Attached is the funding allocation matrix for the complete Michigan High-Speed Positive Train Control Project. The designated fiscal years are actually based on the FRA funding granted to the project. Funding agreements are in place through Phase 5 between the FRA and Michigan DOT and Michigan DOT and Amtrak.

All funding agreements for Phase 5 (FRA fiscal year 1999 funding and Amtrak fiscal year 2000 capital funding) indicate that Amtrak's contribution to the project will be supplemented by $1 million. However, during Amtrak's fiscal year 2000 capital authorization process, only $900,000 was authorized, resulting in a shortfall of $100,000. The FRA and Michigan DOT agreement and the Michigan DOT and Amtrak agreement indicate the funding level of $1 million by Amtrak. These agreements will require that Amtrak fund the shortfall.

Michigan DOT has submitted a grant application to the FRA for the Phase 6 (fiscal year 2000) funding grant in the amount of $3 million. Once the FRA and Michigan DOT have executed the funding agreement for the FRA fiscal year 2000 funding, Michigan DOT and Amtrak will execute the funding agreement for the supplemental monies.

Based on the FRA funding grant and the Michigan DOT and Amtrak Agreement, the project completion date was extended as follows: Project Completion: August 2001; Final Report Due: December 2001.

Phase 1 of ITCS (Incremental Train Control System) revenue service implementation commenced on March 20, 2000 at 12:01 a.m./ET.

Funding	Percentage	Phase						Total
		1	2	3	4	5—Fiscal year 1999	6—Fiscal year 2000	
FULL FUNDING COMMITMENT & PLAN:								
FRA	41.92	$6,081,176	$3,000,000	$1,000,000	.....	$1,000,000	$3,000,000	$14,081,176
MDOT	31.86	9,700,000	.....	1,000,000	.....	.....	.....	10,700,000
Amtrak	11.58	2,891,000	.....	.....	.....	1,000,000	.....	3,891,000
Harmon Industries	14.64	.....	.....	.....	.....	4,916,569	.....	4,916,569
TOTAL	100.00	18,672,176	3,000,000	2,000,000	.....	6,916,569	3,000,000	33,588,745
CURRENT FUNDING AUTHORIZED:								
FRA	42.05	6,081,176	3,000,000	1,000,000	.....	1,000,000	3,000,000	14,081,176
MDOT	31.95	9,700,000	.....	1,000,000	.....	.....	.....	10,700,000
Amtrak	11.32	2,891,000	.....	.....	.....	900,000	.....	3,791,000
Harmon Industries	14.68	.....	.....	.....	.....	4,916,569	.....	4,916,569
TOTAL	100.00	18,672,176	3,000,000	2,000,000	.....	6,816,569	3,000,000	33,488,745

FLEET DATA

Question. Please provide a breakout of the active passenger car and locomotive fleets owned and leased by Amtrak as of February 2000.

Answer.

Amtrak Active Equipment Inventory	Total active	SBU Active		
		NEC	ICY	AMW
Locomotives:				
Diesel Switchers	63	47	10	6
Metroliner Cab Cars	15	7	.....	8
F 40 Cab Cars—NPCU	15	.....	11	4
Diesel Locomotives	292	75	183	34
P 42	119	11	99	9
P 40	41	.....	41	.....
F 40	67	39	24	4
P 32 (BW and DM)	36	18	18	.....
F 59	21	.....	.....	21
GP 40	6	5	1	.....
FL 9	2	2	.....	.....
Electric Locomotives	65	65	.....	.....
AEM 7	52	52	.....	.....
E 60	13	13	.....	.....
Total	450	194	204	52
Turboliners:				
Turbo Power Cars	2	2	.....	.....
Turbo Coach and Food Car	3	3	.....	.....
Total	5	5	.....	.....
Mail, Baggage 8 Express Misc:				
Mail/Baggage/RoadRailer	1,437	8	1,418	11
Mail Baggage (1700)	38	.....	33	5
Baggage Cars (1000–1800)	92	8	78	6
Material Handling Cars (1400–1500)	139	.....	139	.....
Express Cars	250	.....	250	.....
RoadRailer Equipment	918	.....	918	.....
Vans (Mail 48') (Express 53')	451	.....	451	.....
Bogeys	324	.....	324	.....
Coupler Mates (Mail, Express)	123	.....	123	.....
Reefer Railers (Ind. 12 vented 53' vans)	20	.....	20	.....
Auto-Train Auto Carriers	64	.....	64	.....
Inspection And Training Cars	7	2	5	.....
Total	1,508	10	1,487	11
Passenger Cars:				
Viewliner Passenger Cars	51	4	47	.....
Horizon Fleet Passenger Cars	99	.....	64	35
Coaches	82	.....	54	28
Food Service	17	.....	10	7
Former Metroliner Cars	5	.....	5	.....
Amfleet I	469	438	20	11
Coaches	280	265	5	10
Custom Coaches	6	6	.....	.....
Food Service	121	105	15	1
Capstone	62	62	.....	.....
Business Class Coach	9	9	.....	.....

Amtrak Active Equipment Inventory	Total active	SBU Active		
		NEC	ICY	AMW
Coach	53	53	.....	.....
Amfleet II	138	.....	138	.....
Coaches	113	.....	113	.....
Food Service	25	.....	25	.....
Superliner I	252	.....	239	13
Coaches	80	.....	75	5
Diners	30	.....	28	2
Lounges (incl. Autotrain lounges)	29	.....	28	1
Snack Coach	9	.....	8	1
Sleeper	58	.....	58	.....
Coach/Baggage	13	.....	9	4
Smoking Coach	33	.....	33	.....
Superliner II	175	.....	135	40
Coaches	31	.....	21	10
Diners	28	.....	24	4
Lounges	23	.....	18	5
Coach/Kiddie Car	5	.....	.....	5
Sleeper	42	.....	30	12
Sleeper/Deluxe	6	.....	6	.....
Trans. Sleeper	40	.....	36	4
Heritage Fleet Passenger Cars	85	21	56	8
Automat & Table	1	.....	1	.....
Diners	22	.....	22	.....
Sleepers	4	.....	4	.....
Sleepers Crew Dorm	23	.....	23	.....
Lounge	3	3	.....	.....
Dome Coaches or Lounge	3	.....	.....	3
Clocker Coaches	18	18	.....	.....
SF Parlour Car	5	.....	.....	5
SF High Level Dorm, Coaches, Diner	6	.....	6	.....
Total Passenger Cars	1,274	444	699	99
Total Passenger & MB&E Cars	2,782	454	2,186	110

TALGO TRAINSETS

Question. Has FRA issued a final rule regarding railroad passenger car safety equipment? What are the potential implications for the use of Talgo equipment in the United States if the rulemaking is promulgated in the same form as the September 1997 proposed rule?

Answer. The final FRA rule regarding railroad passenger equipment safety was published in May 1999. The regulations established a procedure for obtaining permanent permission to operate equipment that did not meet the newly promulgated buff strength requirements, and allowed continued operation pending action by FRA on requests for relief. Pursuant to those provisions of the final rule, Amtrak petitioned the FRA for permanent permission to continue operating (i.e., "grandfathering") five Talgo trainsets which were already built and in operation at the time the final rule was issued. Four of those trainsets currently operate in the Pacific Northwest Corridor; one trainset will be used for Amtrak's Las Vegas Service. Amtrak's grandfathering petition is still pending before the FRA. Because the final rule called for a May 8, 2000 deadline for operation of non-compliant equipment, and it does not appear that FRA will make a determination by the May 8 deadline, Amtrak has submitted a separate waiver petition requesting extension of the May 8 deadline in order to continue to operate the Talgo trainsets pending final action by FRA on our grandfathering petition. Amtrak's request for extension is currently pending.

Question. What level of investment has Amtrak made or is Amtrak planning to make in the Talgo leases for the Northwest Seattle to Vancouver corridor and for the Los Angeles to Las Vegas service?

Answer.

Pacific Northwest Corridor.—Currently, Amtrak owns one Talgo trainset and leases a second Talgo trainset for Amtrak's Pacific Northwest Corridor operations. The Washington State Department of Transportation owns two Talgo trainsets used in this service. Lease payments on the trainset leased by Amtrak are $175,000 per month. All lease payments made by Amtrak for the leased trainset will be applied to the purchase price of the trainset if the Secretary of the U.S. Department of Transportation grants Amtrak's pending request for a waiver of the requirements of 49 U.S.C. 24305(f) (Amtrak's Buy America requirements). The purchase price for the leased trainset is $11,124,000.

Los Angeles to Las Vegas Service.—Amtrak has entered into a lease agreement with Talgo for one Talgo trainset to be operated in the Los Angeles to Las Vegas Service for up to four (4) years. The lease payments for the trainset, which are not to be paid until the service begins, will be as follows: Year 1—$700,000; Year 2—$1.2 million; Year 3—$1.2 million; and Year 4—$1.2 million.

Question. Last year Amtrak testified for the record that Los Angeles-Las Vegas service could start as early as the first quarter of fiscal year 2000. Has this service been inaugurated? If not, what has slowed down the initiation of this service and when will it begin?

Answer. Amtrak held a ceremony for the Los Angeles-Las Vegas service on December 14, 1999. Amtrak has announced that service is expected to begin this fall.

In November, 1999, Amtrak signed an agreement with the Union Pacific Railroad to construct about 20 miles of double track to ensure a competitive run time. The contract allowed for up to 12 months to complete construction. However, the Union Pacific has encountered delays related to obtaining the necessary environmental permits for construction of the 20 miles of double tracking and the twelve month time frame for construction has been delayed. Amtrak has retained the services of an attorney to assist the Union Pacific with obtaining the permits. We are confident that the necessary permits can be obtained and construction can be completed with few additional delays. While Amtrak plans to run special trains prior to the initiation of regular service, we are hopeful that the service will begin regular revenue service by the end of the year.

Question. Are the cost sharing arrangements for the operation of the Los Angeles to Las Vegas Talgo service which were described in last year's hearing record still in place?

Answer. Operating funds for the service will come from four primary areas: passenger revenues, gaming partners, state support and marketing partners. The State of Nevada has allocated $2 million in Congestion Mitigation and Air Quality funds to support operating costs for the start-up of the service. We are aggressively pursuing partnerships with gaming properties. While the delay in service and transferring ownerships have postponed the commitment of the properties who had previously signed letters of intent to pre-purchase seats, Amtrak continues to discuss a host of partnership agreements with specific gaming properties.

Seat purchase negotiations continue with RIO Hotel and Suites as well as other key Las Vegas properties. The Las Vegas Convention and Visitors Authority remains committed to cooperative marketing programs. A local firm, FFE Advertising, has also been retained for sales for onboard advertising as a way to supplement the cost of the service and revenue is already being generated through this program.

The combination of public and private funding—working with gaming and resort properties, state elected officials and transportation agencies and the railroads has created a business partnership unlike any other in current Amtrak service.

Question. Please describe the capitalization issues that must be resolved to make this service possible. What level of cooperation and investment is being made by Union Pacific Railroad? What level of capital support has Amtrak committed (in fiscal years 1999 and 2000)?

Answer. Amtrak and the Union Pacific Railroad have agreed to provide $28 million of capital improvements prior to commencement of service. Amtrak has agreed to fund half of that amount—$14 million—for the two-year demonstration period. If service continues beyond two years, Amtrak will provide the balance of those funds. The first $14 million is provided by $9 million of Taxpayer Relief Act funds and $5 million of federal funds secured in the 1999 Appropriations Omnibus bill. Amtrak is also funding the construction of a new platform near the Strip.

CAPITAL NEEDS BEYOND FISCAL YEAR 2002

Question. On an annual basis, approximately what level of capital funding from federal sources will Amtrak require beyond the end of fiscal year 2002? This question was not answered satisfactorily in last year's hearing record.

Answer. Amtrak is currently in the process of developing a long-term capital plan as part of its fiscal year 2001 strategic planning process. The capital plan will incorporate the funding required to maintain basic operations, to address state-of-good-repair needs, to take advantage of market opportunities that exist today for the national network, to develop high-speed corridors across the country and to address excess RRTA requirements. Federal funding would be used to support debt service, life/safety, operational reliability, equipment overhaul and refleeting, infrastructure, state-of-good-repair, high-speed corridor development and other capital investment needs. The long-term capital program and budget will be included in Amtrak's fiscal year 2001 business plan, issued in the fall of this year, the annual value of which will be greater than $521 million.

BMWE LABOR COSTS AND CARRY-THROUGH TO OTHER UNIONS

Question. Have Amtrak's other unions used the BMWE agreement as a blueprint? Which unions have reached agreement? What are the costs are associated with these other agreements?

Answer. We have concluded negotiations with all of our bargaining units for the round of bargaining that began in 1995. The BMWE labor agreement set a conceptual framework that has been followed in our subsequent labor agreements. Our agreements contained wage packages valued at approximately 90 percent of those reached nationally by the freight railroads. Additionally, wage increases will be offset by productivity, work rule and/or other wage changes. Through fiscal year 1999 these savings have amounted to about $22.5 million. Preliminary results for the first quarter of fiscal year 2000 show we will reach or exceed our goal of $26 million this year. Additionally about $4 million of the increased wage cost will be paid on reimbursable accounts. Projections show the increased cost of the new agreements will be about $260 million.

QUESTIONS SUBMITTED TO THE FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

STAFFING LEVELS

Question. Please provide a table that delineates the current fiscal year 2000 and proposed fiscal year 2001 staffing levels by office, and break down the allocation by state and resource center.

Answer.

	Fiscal years—	
	2000	2001
HEADQUARTERS:		
Administrator & Deputy	.....	4
Assistant Administrator [1] (Chief Safety Officer)	4	8
Regulatory Ombudsman	.....	1
Chief Counsel [2]	2	14
Public & Consumer Affairs	2	5
Civil Rights	.....	3
Associate Administrator Offices	.....	8
Budget, Finance & Management Services	6	17
Human Resources (includes NTC @ 9)	12	20
Research & Technology	16	20
Data Analysis & Information Systems	51	49
Policy, Plans & Regulations	19	20
Bus & Truck Standards & Operations	24	26
Enforcement & Compliance	35	37
Motor Carrier Safety Programs	22	23
HQ TOTAL	193	255
FIELD ORGANIZATION:		
Service Centers	51	60

	Fiscal years—	
	2000	2001
State FMCSA Division Offices	470	534
FIELD TOTAL	521	594
FMCSA TOTAL	714	[3] 849

[1] Includes 4 Exec Sec positions.
[2] 12 legal position are in the field.
[3] Includes 17.6 legal positions transferred from FHWA.

Question. Please provide a table that delineates the fiscal year 2000 and proposed fiscal year 2001 costs of training, transportation, travel, international travel, PCS, communications, nonmandatory bonuses or incentive (awards), and other administrative expenses.

Answer.

	Fiscal years—	
	2000	2001
Salaries & Benefits—Salaries & Benefits	43,534,000	54,635,000
Salaries & Benefits—Incentive Awards	179,000	225,000
Travel—Domestic	3,505,000	4,184,000
Travel—International	15,000	30,000
Transportation	110,000	316,000
Rent		4,561,000
Communications	419,000	423,000
Printing	564,000	667,000
Supplies	291,000	480,000
Equipment	1,867,000	2,277,000
Other Services—Crash Data Collection	4,000,000	2,750,000
Other Services—Crash Causation Database	3,000,000	
Other Services—Census Update	4,500,000	
Other Services—Incident Management	2,000,000	
Other Services—School Bus Study	200,000	
Other Services—Operation Respond	350,000	
Other Services—Research & Technology		9,550,000
Other Services—Training	1,250,000	1,550,000
Other Services—PCS	1,000,000	1,124,000
Other Services—ADP	3,700,000	3,900,000
Other Services—Intrastate Data Enhancement		500,000
Other Services—Vision Waiver Administration		636,000
Other Services—Basic Operation Costs from FHWA		4,386,000
TOTAL	70,484,000	92,194,000

FEDERAL INSPECTORS

Question. What are the relative tradeoffs of increasing the number of federal inspectors at the border in fiscal year 2001 versus assigning those additional positions to other areas of the country based solely on safety risks and number of motor carriers?

Answer. The out-of-service rate for Mexican domiciled vehicles at the border is 39 percent compared to the national average of 25 percent. Even though the border rate is an improvement over past years, it remains substantially higher than the national average. The Federal inspectors assigned at the border were specifically hired to augment the state enforcement presence already there to increase enforcement and compliance activities and address border safety concerns. To continue to address these safety concerns, we plan to increase the Federal inspection presence at the border from 40 to 60 inspectors. As the states' safety inspection facilities become operational and fully staffed within the next 5 to 7 years, the Federal presence at the border will be decreased and inspectors will be reassigned to other respon-

sibilities. At this time, assigning the Federal inspectors to other areas is not possible without compromising safety along the southern border.

TRUCK AND BUS SAFETY

Question. How does FMCSA propose to address each of the findings and recommendations specified in the recent IG and GAO reports which pertain to the effectiveness of the federal truck and bus safety programs.

Answer. Provided below are the recommendations from the 1999 IG and GAO motor carrier safety reports and the status of actions taken by FMCSA.

IG Recommendation A1.—Strengthen its enforcement policy by establishing written policy and operating procedures to take enforcement action against motor carriers with repeat violations of the same acute or critical regulation. Strong enforcement actions would include assessing fines at the statutory maximum amount, the issuance of compliance orders, not negotiating reduced assessments, and when necessary, placing motor carriers out of service.

Status.—Enforcement guidance was issued in April 1999 and June 1999 which doubles the number of compliance reviews performed by safety specialists and increases penalties as provided in TEA–21. The Federal Motor Carrier Safety Administration (FMCSA) established a repeat violators policy and a limitation on negotiated settlements except in unusual circumstances in June 1999. FMCSA issued an NPRM in August 1999 to implement the TEA–21 shutdown authority and expects to complete a final rule by Fall 2000. At that time, new policy guidelines will be issued to FMCSA field staff to ensure shutdown procedures are utilized to the fullest extent. In the interim, the agency will follow current procedures on compliance orders and out-of-service orders. The enforcement manual identifies when out-of-service orders are used, penalties, hearing procedures, and appeal rights. Out-of-service orders are prepared by the legal staff in the Regional Service Centers, based on the evidence collected by the field investigator and are signed by the Area Administrator. The orders are prepared case-by-case, each case is based on legal precedent and preparation of the order is specific to the case. Compliance order directions are also contained in our enforcement manual. A limited number of senior enforcement staff at the Regional Service Center have the responsibility for preparing the compliance orders. These officials are well versed in preparing and issuing compliance orders. The FMCSA expects to publish a final rule requiring motor carriers determined to be unfit to correct safety problems within 60 days or face a shutdown. This requirement will provide the FMCSA with its strongest enforcement tool yet.

IG Recommendation A2.—Remove all administrative minimum fines placed in the Uniform Fine Assessment (UFA) program and increase the maximum fines to the level authorized by TEA–21.

Status.—Congressional direction set in Section 222 of the Motor Carrier Safety Improvement Act (MCSIA) of 1999 recommends that the Secretary establish minimum and maximum civil penalties for violations where there are repeated violations or a pattern of violations of critical or acute regulations. A study of the effectiveness of penalty provisions is also required by the Act. FMCSA will begin the study in fiscal year 2001 and a report to Congress will be prepared by September 30, 2002. Guidance was issued in June 1999 that updates the UFA model with the TEA?21 fine schedule, including progressive sanctions for repeat violators.

IG Recommendation A3.—Establish stiffer fines that cannot be considered a cost of doing business and, if necessary, seek appropriate legislation raising statutory penalty ceilings.

Status.—Completed. FMCSA updated the Uniform Fine Assessment model with the TEA–21 fine schedule and set progressive sanctions for repeat violators with an effort to obtain settlement for the full amount of the assessment. Guidance was issued to FMCSA field offices in June 1999 to establish a repeat violators fine policy and to limit negotiated fines settlements. FMCSA continues to monitor the appropriateness of fine levels. The average fine settlement has now increased from $3,650 in 1998 (as calculated by FMCSA) to $4,479 in the first quarter of fiscal year 2000. The difference between the average amount claimed for enforcement cases compared to average settlement was 17 percent in fiscal year 1998. The difference between these two figures is now only 3 percent, demonstrating the effectiveness of the FMCSA policy limiting negotiated settlements.

IG Recommendation A4.—Implement a procedure that removes the operating authority from motor carriers that fail to pay civil penalties within 90 days after final orders are issued or settlement agreements are completed.

Status.—Section 206 of the MCSIA of 1999 includes authority to take strong sanctions, including removing operating authority, against carriers that fail to pay civil

fines. The statute established a deadline of December 9, 2000 to issue regulations by implementing this provision.

IG Recommendation A5.—Establish criteria for determining when a motor carrier poses an imminent hazard.

Status.—Section 208 of the MCSIA of 1999 revises the definition of imminent hazard. A rulemaking to implement this provision will be issued by summer 2001.

IG Recommendation A6.—Require follow-up visit and monitoring of those motor carriers with a less-than satisfactory safety rating, at varying intervals, to ensure that safety improvements are sustained or, if safety has deteriorated, that appropriate sanctions are invoked.

Status.—FMCSA enforcement policy is to target high-risk carriers for enforcement. The Agency employs the Safety Status Measurement System (SAFESTAT), using motor carrier crash, roadside inspection and compliance review data to target carriers for review. Given limited staff resources, we believe this is the most effective safety strategy. At present, follow-up is required only on carriers with enforcement actions. Current policies dictate that enforcement follow-ups must be recorded, tracked, and prioritized and the manner of handling follow-ups must be documented. FMCSA has calculated the resource requirements to conduct follow-up visits with all motor carriers receiving less-than-satisfactory ratings. Our estimate is that 31 additional Safety Investigators will be required to meet this requirement. If current staff resources were diverted to meet this requirement, we estimate that 1,500 fewer compliance reviews would be performed annually.

In the near future carriers with unsatisfactory safety ratings will be subject to shutdown orders under a TEA–21 rulemaking requirement. The final rule is under Departmental review and concurrence. The FMCSA will issue a full operational policy, including follow-up provisions, in advance of implementation of the rule, which will become effective 90 days after its publication in the Federal register.

The agency's priority program is the nationwide implementation of the Performance and Registration Information Systems Management (PRISM) program. A key component of PRISM is the Motor Carrier Safety Improvement Process (MCSIP). The MCSIP tracks high-risk carriers through compliance reviews and applies progressive sanctions, if safety improvements are not made. An eight month follow-up is required for those carriers with an enforcement case. Additional funding was requested by the Administration to rapidly expand PRISM. In addition, carriers with unsatisfactory safety ratings will be subject to shutdown orders under TEA–21.

IG Recommendation A7.—Establish a control mechanism that requires written justification by the FMCSA State Director when compliance reviews of high-risk carriers are not performed.

Status.—Completed. Consistent with FMCSA policy to focus enforcement on problem carriers, each State Director is expected to complete reviews on all high-risk carriers identified by semi-annual reports. An eight month follow-up review is required for those carriers with an enforcement case. list. A review may not be performed if the carrier has been subject to a review within the previous 12 months. If a review is not performed on a high-risk carrier, the Director must have evidence of corrective action taken by the motor carrier. Completion of compliance reviews on all high-risk carriers is monitored by FMCSA headquarters.

IG Recommendation A8.—Establish a written policy and operating procedures that identify criteria and time frames for closing all enforcement cases, including the current backlog.

Status.—Enforcement guidance has been issued on closing the backlog of enforcement cases. To date, FMCSA has reduced the overall backlog by over 86 percent to 138 cases U.S. carriers and 43 foreign cases. Written procedures for closing routine enforcement cases are described in the FMCSA enforcement manual. The agency will reaffirm these procedures with its field staff.

IG Recommendation B1.—Require applicants requesting operating authority to provide the number of commercial vehicles they operate and the number of drivers they employ and require all motor carriers to periodically update this information.

Status.—FMCSA requires applicants for operating authority to submit a Motor Carrier Identification Report, Form MCS–150, which captures vehicle and driver data. Section 217 of the MCSIA of 1999 requires that motor carriers update their motor carrier identification report one year from enactment. FMCSA is proposing to update the motor carrier census by the statutory deadline of December 9, 2000 and require periodic updates of the information. Also, to ensure that the information is updated periodically, FMCSA is implementing the PRISM program. States participating in PRISM require carriers to update their MC–150 annually when their commercial vehicles are registered.

IG Recommendation B2.—Revise the grant formula and provide incentives through the Motor Carrier Safety Assistance Program grants for those states that

continue to report accurate, complete and timely commercial vehicle crash reports, vehicle and driver inspection reports, and traffic violation data.

Status.—FMCSA issued the March 1999 MCSAP Notice of Proposed Rulemaking including incentive funding to encourage states to meet the target deadlines for reporting accurate, complete, and timely data. The final MCSAP rule is now in Departmental review.

IG Recommendation B3.—Withhold funds from the Motor Carrier Safety Assistance Program (MCSAP) grants for those states that continue to report inaccurate, incomplete, and untimely commercial vehicle crash data, vehicle and driver inspection data, and traffic violation data within a reasonable notification period, such as one year.

Status.—FMCSA is using incentive funding in the MCSAP program as a means of prompting states to improve the timeliness and completeness of commercial vehicle reports. In addition, FMCSA has targeted for assistance through its Division offices a number of states with the most significant data collection problems. The agency is concerned that taking MCSAP funds from states with data problems may lead to reduced levels of enforcement by the affected jurisdictions. This could have the unintended consequence of diminishing safety without improving state data collection. Studies identifying states with crash reporting problems have been completed. In fiscal year 1999, 15 of the states received special MCSAP grants to improve data collection and reporting. All states are eligible for the grants. All states participating in the MCSAP have submitted crash data improvement plans. The agency will continue to work with the states and state enforcement organizations to improve data collection.

IG Recommendation B4.—Initiate a program to train local enforcement agencies for reporting of crash and roadside inspection data, including associated traffic violations.

Status.—FMCSA has been working with the state of Minnesota to create a crash investigation course for police to improve crash investigation data collection. The course has now been expanded to include training at facilities in Florida year-round. FMCSA will offer the course more broadly in fiscal year 2000. Courses directed at MCSAP personnel in reporting crash and inspection data are open to local enforcement agencies, space permitting. Several MCSAP agencies have local government sub-grantees. These local jurisdictions must meet the same standards for roadside inspection and crash data reporting imposed on the state. The agency has been working with the Commercial Vehicle Safety Alliance to persuade local governments to participate in motor carrier safety programs, while ensuring that standards for data quality and reporting are met.

IG Recommendation B5.—Standardize OMC (now FMCSA) and NHTSA crash data requirements, crash data collection procedures, and reports.

Status.—FMCSA and NHTSA have been working together along with organizations representing state safety agencies for several years to standardize a core set of data elements that each state should include on their police crash reports. The effort is a cooperative one with NHTSA, the National Association of Governor Highway Safety Representatives, American Automobile Association, International Association of Chiefs of Police, the Commercial Vehicle Safety Alliance and others. These criteria cover all crash reports, including trucks and commercial passenger vehicles. This effort, the Model Minimum Uniform Crash Criteria, would enhance crash data quality for both FMCSA and NHTSA. The agency will continue to work with these organizations to promote adoption of the criteria, which is voluntary.

IG Recommendation B6.—Obtain and analyze crash causes and fault data as a result of comprehensive crash evaluations to identify safety improvements.

Status.—FMCSA and NHTSA have an interagency agreement to conduct a large truck crash causation study within the framework of the NHTSA National Automotive Sampling System. This effort will collect detailed crash data on a sample of serious large truck crashes and build a crash causation data base. The crash causation study is required under Section 224 of the MCSIA of 1999. Data collection methods and forms are now in development and crash data investigations will begin in four pilot sites in June 2000. The four pilot programs are in: Philadelphia, Pennsylvania; Charles and Prince Georges Counties, Maryland; Chicago, Illinois; and Yuma and La Paz Counties, Arizona.

GAO Recommendations.—The GAO recommended in their 1999 report on the motor carrier program that the Department prioritize the activities in the Agency's draft safety action plan according to their potential for reducing the number of crashes and deaths and, to ensure that the activities are completed in a timely manner, only undertake those that the Office is reasonably sure it can complete within available budgetary and human resources.

Status.—The final Safety Action Plan completed in February 2000 is a statement of the Agency's top priorities for the next three years. Within the Plan, the highest priority is assigned to strengthening targeted enforcement, completing important rulemakings, improving safety information and technology, and increasing safety awareness. Over three quarters of the actions included in the Plan are required by law in appropriations legislation, the MCSIA, TEA–21, or other laws. The Plan sets out only a subset of the agency's overall activities. Many research projects and rulemakings that are underway have not been included. Taken together the actions in the plan will materially contribute to the 50 percent fatality reduction goal Secretary Slater has set for our agency. The Department of Transportation has recommended increases in FMCSA funding and personnel levels in the fiscal year 2001 budget, and we believe these are appropriate and adequate to carry out the Plan in the near term. We believe achieving the goal will be the result of the aggregation of our efforts in targeted enforcement, data improvements, new technology, safety awareness, and strengthening equipment and operating standards along with the concerted efforts of all segments within the motor carrier industry and safety community.

MCSIA

Question. Please describe how your budget request addresses each of the new responsibilities specified in the Motor Carrier Safety Improvement Act of 1999 (MCSIA).

Answer. MCSIA requirements to establish the FMCSA are included in the proposed fiscal year 2001 budget. Both staffing and support services necessary to operate independently in fiscal year 2001 are included as part of the requested $92,194,000. The $65 million of increased MCSAP funding provides $5 million for the crash causation study and $5 million for information systems and the remaining $55 million will be distributed similarly to the $100 million in fiscal year 2001 MCSAP funding provided in TEA–21. The proposed fiscal year 2001 budget plans to use all of the $5 million of MCSAP information systems funds to support crash data collection efforts. The proposal to fund CDL improvements with $10M of RABA funds will provide needed funding to the states to improve their existing systems. The $12 million in information systems and strategic safety initiatives requested for fiscal year 2001 broadly support both new and existing FMCSA responsibilities. The information systems funds will in part address new initiatives to update and improve carrier information. Data analysis funding plays a critical role in evaluating planned and existing safety initiatives. The evaluation of minimum and maximum penalties is typical of data analysis evaluations. PRISM's $5 million relates directly to new enforcement of carrier registration requirements. The $1 million in driver programs directly supports the broad mandate in MCSIA for CDL improvements.

IMPLEMENTATION STRATEGY

Question. For each new regulatory or programmatic responsibility or required study specified in the MCSIA, please detail an implementation strategy, as well as the amount of fiscal year 2000 and fiscal year 2001 funds that will be allocated to conduct each task.

Answer. The requested information is provided in the table below:

MCSIA requirement	Implementation	Funding
Development of long-term strategy to improve CMV, operator, and motor carrier safety.	Performance Plan and Safety Action Plan issued in February 2000; Progress report will be issued in May 2000; Strategic Plan will be developed by Fall 2000.	$155,000 of fiscal year 2001 funds is estimated for the strategic planning initiative.
Improvements in Commercial Driver Licensing (including driver disqualifications & serious traffic violations, uniform state data transmission, and strengthened state program requirements).	Comprehensive rulemaking will be conducted to establish definitions and specific state requirements to implement MCSIA CDL improvements.	FMCSA staff resources and in fiscal year 200l: $10 million RABA $1 million Driver Program.
Include medical qualification certificate in CDL.	Conduct rulemaking. NPRM is in review.	FMCSA staff resources.

MCSIA requirement	Implementation	Funding
Study reporting of positive drug tests by CDL holders.	Conduct feasibility study and report to Congress. Privacy issues will be given attention in study.	Limited fiscal year 2001 funding is estimated.
Enforcement of carrier registration requirements.	Develop specific procedures for carrying out enforcement to ensure due process and provide guidance to field staff.	FMCSA staff resources.
Revocation or suspension of registration for failure to pay penalties.	Required rulemaking	FMCSA staff resources.
Minimum and maximum penalties; study of effectiveness.	Examining changes to Uniform Fine Assessment model and related policy changes. Preliminary proposal is in review to conduct effectiveness study.	$150,000 of fiscal year 2001 data analysis funding.
Safety reviews of new motor carriers and minimum requirements to ensure new carrier applicants are knowledgeable about FMCSRs.	Establish program to assure safety fitness of new carriers including (1) background research and review of past studies; (2) design conceptual framework for new entrant safety fitness process; (3) establish minimum requirements for knowledge about safety regulations; and (4) develop procedures for safety reviews of new entrants within 18 months of beginning operation.	FMCSA staff resources in short-term and potential fiscal year 2002 funding requirements.
Training and certification of motor carrier safety auditors.	Required rulemaking	FMCSA staff resources. Fiscal year 2002 funding requirements.
Implementation of DOT Inspector General recommendations.	Detailed report addressing each recommendation issued March 9, 2000. Followup reports will be sent to Congress every 90 days.	FMCSA staff resources.
Issuance of small passenger van regulations.	Required rulemaking. Final rule in review.	FMCSA staff resources.
Staffing standards for international border areas.	FMCSA is working with Southern border states and International Association of Chiefs of Police to establish criteria (including MCSIA criteria) for setting standards.	FMCSA staff resources.
Definition of imminent hazard	Technical rule change	FMCSA staff resources.
24-hour operation of driver hotline	Modify agreement with hotline contractor for extended operation.	$375,000 in fiscal year 2001.
Update of motor carrier identification reports.	Requests sent in April 2000 to carriers to update records on voluntary basis; mandatory carrier refiling will be required upon completion of final rule.	FMCSA staff resources and partial Information Systems funding.

MCSIA requirement	Implementation	Funding
Commercial motor vehicle crash causation study.	Nationally representative data on the primary and secondary causes of serious large truck crashes will be collected by teams of trained investigators from NHTSA's National Automotive Sampling System and FMCSA-funded truck inspectors. Testing in four pilot sites will begin in Summer 2000 and full data collection will begin January 2001.	$5 million in fiscal year 2001 MCSAP funds.
Program to improve collection and analysis of commercial motor vehicle crash data.	FMCSA is working with NHTSA to replicate the success of the Fatality Analysis Reporting System in collecting fatal crash data from the States. Involvement will include State agencies which receive federal bus and truck safety funds, police agencies, and other State and local agencies with responsibility for traffic records collection.	$7.75 million in fiscal year 2001 MCSAP and administrative funds.

Question. What is the expected date of completion or initial implementation of each provision?

Answer. This information is provided in the table below:

MCSIA requirement	Expected completion date
Development of long-term strategy to improve CMV, operator, and motor carrier safety.	Safety Action Plan and Performance Plan completed February 2000. Progress Report May 2000. Strategic Plan Fall 2000.
Improvements in Commercial Driver Licensing (including driver disqualifications & serious traffic violations, uniform state data transmission, and strengthened state program requirements).	NPRM Fall 2000. Final Rule Fall 2001.
Include medical qualification certificate in CDL	NPRM Summer 2000. Final Rule Spring 2001.
Study reporting of positive drug tests by CDL holders	December 2001.
Enforcement of carrier registration requirements	Summer 2000.
Revocation or suspension of registration for failure to pay penalties.	December 2000.
Minimum and maximum penalties; study of effectiveness	Minimum and Maximum Penalties—Fall 2000. Effectiveness Study—September 2002.
Safety reviews of new motor carriers	December 2000.
Minimum requirements to ensure new carrier applicants are knowledgeable about FMCSRs.	December 2000.
Training and certification of motor carrier safety auditors	December 2000.
Implementation of DOT Inspector General recommendations	Report issued March 9, 2000; Report each 90 days.
Issuance of small passenger van regulations	Final Rule Summer 2000.
Staffing standards for international border areas	December 2000.
Definition of imminent hazard	Fall 2000.
24-hour operation of driver hotline	May 2000.
Update of motor carrier identification reports	Voluntary carrier update December 2000. Final Rule requiring periodic update Spring 2001.
Commercial motor vehicle crash causation study	Full crash causation study data collection begins January 2001. Study completion 2004.
Program to improve collection and analysis of commercial motor vehicle crash data..	Pilot testing for large bus and truck data collection improvement programs in 2000. Implementation of data collection improvement programs in all states that require them in 2001.

GPRA GOALS AND OBJECTIVES

Question. What are the FMCSA's GPRA goals and objectives and how is the fiscal year 2001 budget request designed to address each of those goals and objectives?

Answer. As prescribed in the Motor Carrier Safety Improvement Act of 1999, the performance goals and indicators of the FMCSA are:

—reducing the number and rate of crashes, injuries, and fatalities involving commercial motor vehicles.

—improving the consistency and effectiveness of commercial motor vehicle, operator, and carrier enforcement and compliance programs.

—identifying and targeting enforcement efforts at high-risk commercial motor vehicles, operators, and carriers.

—improving research efforts to enhance and promote commercial motor vehicle, operator, and carrier safety and performance.

Two performance indicators are used to measure progress towards these goals: reduction of the number of fatalities in crashes involving large trucks 50 percent by the end of 2009, using a 1998 baseline of 5,374; and reduction of the number of persons injured in crashes involving large trucks 20 percent by the end of 2008, using a 1998 baseline of 127,000.

While there are no numerical goals established for the rates of fatalities and injured persons involved in motor carrier traffic crashes, the following performance indicators are also used by the FMCSA to monitor progress toward the safety goals: reduction of the rate of large truck-related fatalities per 100 million commercial vehicle-miles-traveled (VMT); reduce the rate of motor vehicle-related fatalities per 100 million commercial vehicle-miles-traveled (VMT); and reduction of the rate of motor vehicle-related injuries per 100 million commercial vehicle-miles-traveled (VMT).

In fiscal year 2001, the FMCSA will make progress towards achieving these goals by:

—increasing enforcement and better targeting high-risk carriers and commercial motor vehicle drivers;

—improving the timeliness of the issuance of vehicle equipment and operating standards;

—improving safety information and commercial motor vehicle technologies; and

—increasing the safety awareness of the driving public and motor carrier industry.

In particular, the agency will continue to move aggressively to significantly increase its targeted enforcement program. Targets for increased compliance reviews have been established for each safety investigator and guidance has been issued to limit the use of negotiated fines. The agency will also strengthen its enforcement efforts at the border by significantly increasing inspection staff in preparation for full implementation of the North American Free Trade Agreement. With respect to data deficiencies, the agency is addressing this issue through regulation and an effort to update existing census information. In addition, FMCSA is working to improve the performance of its vehicle inspection and crash data systems for the collection of commercial motor vehicle crash data. These strategic initiatives are included in the fiscal year 2001 budget request and in the Agency's fiscal year 2001 Performance Plan. Funding requests for key areas of the National Motor Carrier Safety Program include MCSAP ($165M), Information Systems ($22M) and General Operating Expenses ($92.2M) for staff enhancements and research and technology.

NAFTA IMPLEMENTATION

Question. Please provide an update on activities or efforts that are intended to open up the southern border in order to implement the NAFTA, being certain to address progress to date, remaining concerns, and the status of each of the following: efforts to improve safety monitoring of Mexican carriers, exchange of driver licensing information, frequency and quality of training of Mexican inspectors, out-of-service rates of Mexican carriers, and safety management systems for Mexican carriers. Please provide quantitative data to support your answer.

Answer. Although the United States and Mexico have been engaged in safety consultations since 1996, the pace of the talks has slowed considerably as the countries await a hearing before an arbitration panel under the NAFTA's dispute resolution procedures. The panel met on May 17, 2000 to examine Mexico's claim that the United States has violated the NAFTA by not lifting restrictions on cross-border trucking and bus services as provided in the Agreement's access liberalization schedule. In an effort to prepare for the eventual implementation of the NAFTA's land transportation provisions, the Department has increased inspection capacities at the border. We believe, however, that given the high volume of cross-border truck

traffic, this step alone is not sufficient to assure the highest level of safety compliance. Adequate assurances of safety also require that Mexico adopt safety controls within its own borders. Thus, the restrictions on Mexican carrier operations will continue until Mexico has established an effective motor carrier safety oversight program for carriers seeking U.S. operating authority. The Department is committed to continue to work cooperatively with Mexico to achieve this goal and ensure safe cross-border operations.

The U.S. and Mexican Governments have agreed that Mexico will complete the following actions before the Department begins to process Mexican motor carrier applications for operating authority: (1) issue final standards requiring a log book to record drivers' hours of service; (2) use the Commercial Vehicle Safety Alliance's criteria for inspecting vehicles; (3) establish a roadside vehicle inspection program near the U.S. border; (4) implement databases to provide DOT with specific data on carrier applicants—including information on their drivers and vehicles; and (5) put in effect a carrier safety oversight program and provide the results to DOT. Mexico has taken significant steps to improve its carrier safety program, but work still remains to be done. For example, although Mexican inspectors have been trained (with DOT's help) to conduct commercial vehicle inspections in accordance with U.S. standards and procedures, Mexico does not yet have a fully functioning vehicle roadside inspection program. Mexico has developed an integrated information system linking driver, vehicle and carrier safety and economic information. This information system includes inspection/supervision, accident, and infraction modules. Several of the modules are in final testing and Mexico anticipates they will be fully operational in the summer of 2000. The carrier economic data base information has been fully entered and the driver license data base information is being entered now. This information system will be electronically connected to the U.S. systems providing enforcement officials with real-time access to the information.

In addition to our bilateral efforts with Mexico, we have been working closely with the border states to increase their inspections and other compliance and enforcement activities. Over the past 5 years, we have allocated over $15 million in special funding for border commercial motor vehicle safety programs and projects. These efforts have helped improve compliance with federal safety requirements and reduce the out-of-service rate of Mexican vehicles from over 50 percent in 1995 to 39 percent in 1999. DOT also is working cooperatively with the state enforcement agencies in the border states to make certain that the long-term needs of the enforcement agencies—including funding for inspection facilities and electronic clearance technologies—are given priority consideration in the state's application for grants made available under the Transportation Efficiency Act for the Twenty-First Century's (TEA–21) National Corridor Planning and Development Program (Section 1118), the Coordinated Border Infrastructure Program (Section 1119) and other Federal?Aid programs. Under the corridor and border program, $10 million is being made available to the General Services Administration (GSA) for the construction of transportation infrastructure necessary for law enforcement in the border states. Also, in fiscal year 2000, $10 million has been set aside for the states of Arizona, California, New Mexico, and Texas for safety and enforcement projects.

States are effectively leveraging their own revenues with federal funds available under these programs to address the need for permanent facilities along the border. California has state-of-the art facilities at their two major commercial ports of entry. Arizona has purchased land to construct a facility at Nogales. New Mexico plans on building a facility at Santa Teresa. Texas intends to build facilities at eight key locations.

MEXICAN DOMICILED COMMERCIAL VEHICLES

Question. What are the safety parameters that must be reached before the Department is likely to open up the border to the entrance of Mexican-domiciled commercial vehicles beyond the commercial zone? How far along are the Mexicans in reaching these parameters? What are the remaining concerns? How do the Department's fiscal year 2000 activities contribute towards the attainment of those safety assurances?

Answer. The U.S. and Mexican Governments have agreed that Mexico will complete the following actions before the Department begins to process Mexican motor carrier applications for operating authority.

(1) *Issue final standards requiring a log book to record drivers' hours of service.*—Mexico's Secretariat of Communications and Transportation (SCT) recently issued regulations mandating log book requirements. In addition, SCT has established a committee to analyze Mexico's current labor law to determine if work hour require-

ments can be made more specific to commercial motor vehicle driver operations. This work is yet to be completed.

(2) *Use the Commercial Vehicle Safety Alliance's (CVSA) criteria for inspecting vehicles*.—On June 9, 1999, SCT published proposed inspection standards that are very similar to the CVSA criteria. The requirements are being prepared for publishing criteria in final form.

(3) *Establish a roadside vehicle inspection program near the U.S.-Mexico border*.—SCT maintains that it is conducting inspections at locations near the U.S. border.

(4) *Implement databases to provide DOT with specific data on carrier applicants—including information on their vehicles and drivers*.—SCT has developed a state of the art information system that integrates databases containing carrier, driver, and vehicle information. SCT officials are currently entering information into these databases and developing an electronic link to the U.S. system to enable DOT and SCT to share carrier safety information.

(5) *Put in effect a carrier safety oversight program and provide the results to DOT*.—SCT is in the process of developing a program for carriers seeking authority to operate in the United States and for carriers that transit the United States on the way to Canada.

SCT continues to make progress in achieving the agreed actions. The Department's major concern is that there be a system in place in Mexico to independently verify the safety compliance of the carriers that will be operating across the border into the United States. We believe that once these actions are completed, both countries will be better able to ensure safe cross-border operations.

The Department's fiscal year 2000 activities continue to concentrate on providing technical assistance to Mexico to complete development and to populate its information systems. In addition, the Department continues to emphasize the importance of developing compatible motor carrier safety requirements throughout North America as part of the trilateral discussions with Mexico and Canada.

Question. Please break out by project or activity exactly how much the Department is allocating during fiscal year 2000 to promote the safety of Mexican-domiciled commercial vehicles and drivers that currently enter the United States. In addition to specifying the purpose and nature of each project and activity, please assess whether and how these expenditures improve safety and compliance with U.S. registration requirements and safety regulations.

Answer. In fiscal year 2000, $4.75 million was made available to the border states to promote safety at the border. Of the $4.75 million, $575,000 was allocated to develop software to provide better network access to border inspectors, and to conduct a study to determine the extent of the safety problems associated with the cross-border commercial van operations commonly referred to as camionetas. Sec. 212 of the Motor Carrier Safety Improvement Act of 1999 requires that we complete rulemaking to determine which small passenger vans should be covered by FMCSRs.

Consistent with our goal to optimize the level of the enforcement and compliance activities along the southern border, the majority of the funds awarded to the states are used for state personnel services and expenses to conduct inspections. Other initiatives include training, education and outreach activities, and purchase of vehicles and other equipment used by the inspectors. We estimate that these increased enforcement efforts will result in over 83,000 commercial motor vehicle inspections along the border regions.

In addition to the state grants, the FMCSA will spend approximately $1,632,000 to support the Federal inspectors assigned at border locations. We estimate that Federal inspection efforts will result in an additional 14,000 inspections.

U.S SAFETY AND REGISTRATION

Question. Please break out the expected allocation of similar funds requested for fiscal year 2001 and specify how fiscal year 2001 projects and activities are anticipated to further U.S. safety and registration objectives.

Answer. In fiscal year 2001, $7,750,000 will be made available for border commercial motor vehicle safety program and enforcement activities and projects directed at improving the compliance rate of foreign commercial motor vehicle operations with both safety standards and registration requirements. The funds are being made available to both the northern and southern border states. However, in recognition of the safety concerns that still exist along the southern border, proposals received from California, Arizona, New Mexico, and Texas will receive priority consideration.

Each border state is invited to submit a performance-based proposal for these funds reflecting safety performance goals. In fiscal year 2001, priority consideration will be given to those projects that include hiring additional permanent inspectors

to increase the enforcement presence along the border and implement the staffing standards. These staffing standards are being developed in compliance with Sec. 218 of the Motor Carrier Safety Improvement Act of 1999. The goal of the standards is to ensure, to the greatest extent possible, that inspectors are on duty at all border crossings at all times the U.S. Customs Services' ports of entry are open to commercial vehicle traffic. States have been reluctant to use the special border grants to hire additional inspectors because the availability of the funds in subsequent years has been uncertain. Since TEA–21 provides support for the special border grant program through fiscal year 2003, states are being encouraged to consider using the funds to hire new personnel and establish a more permanent presence along the border.

A portion of the available program funds may be set aside to support the activities of the International Association of Chiefs of Police (IACP) to complete Spanish translation of inspection training videos, and to support other safety program activities that are of mutual benefit to all border States and the nation.

All of these projects are directed at improving the states' capabilities to increase enforcement and compliance activities and establish a permanent and consistent enforcement presence along our border.

OTHER SERVICES FUNDS

Question. Please break out in detail how FMCSA expects to spend the $18.875 million of "other services" included within the fiscal year 2001 base. Please do the same for the fiscal year 2001 base amounts requested for supplies and equipment. How are the Department's fiscal year 2001 anticipated activities expected to contribute towards the attainment of those safety assurances.

Answer. A break out of the $18.875 "other services" is provided in the following chart. The same chart was prepared in response to a previous question. Supplies and equipment funding supports FMCSA operations in over 75 offices nationally. The funding for supplies and equipment are allocated at the beginning of each fiscal year to headquarters and our 52 Division Offices located in each state. The allocation is generally based on size of the office and specific unique annual needs. The typical allocation provides approximately 30 percent of the funds to headquarters and 70 percent to the field offices. The break out of supplies vs. equipment for both fiscal year 2000 and fiscal year 2001 is also included in the chart that follows. In fiscal year 2001, FMCSA's proposed additional administrative staff will study and procure the support of a fiscal management and information system that will provide ready access to more detailed expenditures of all FMCSA accounts.

	Fiscal years—	
	2000	2001
Salaries & Benefits—Salaries & Benefits	43,713,000	54,860,000
Salaries & Benefits—Incentive Awards	179,000	225,000
Travel—Domestic	3,505,000	4,184,000
Travel—International	15,000	30,000
Transportation	110,000	316,000
Rent		4,561,000
Communications	419,000	423,000
Printing	564,000	667,000
Supplies	291,000	480,000
Equipment	1,867,000	2,277,000
Other Services—Crash Data Collection	4,000,000	2,750,000
Other Services—Crash Causation Database	3,000,000	
Other Services—Census Update	4,500,000	
Other Services—Incident Management	2,000,000	
Other Services—School Bus Study	200,000	
Other Services—Operation Respond	350,000	
Other Services—Research & Technology		9,550,000
Other Services—Training	1,250,000	1,550,000
Other Services—PCS	1,000,000	1,124,000
Other Services—ADP	3,700,000	3,900,000
Other Services—Intrastate Data Enhancement		500,000
Other Services—Vision Waiver Administration		636,000

	Fiscal years—	
	2000	2001
Other Services—Basic Operation Costs from FHWA		4,386,000
TOTAL	70,484,000	92,194,000

Question. Please break out in detail how FMCSA is allocating the $18.875 million of "other services" included with the fiscal year 2000 appropriation. Please do the same for the amounts appropriated for supplies and equipment.

Answer. The previous answer provides the requested response for both fiscal year 2000 and fiscal year 2001.

SHARE THE ROAD

Question. Please describe in detail what FMCSA is doing during fiscal year 2000 to advance "share the road" activities. Exactly how much is being spent on each aspect of this effort?

Answer. The FMCSA, in cooperation with NHTSA, is expanding the scope of the "share the road" effort to include safety recommendations for all types of highway users (drivers of passenger cars, trucks, buses, motorcyclists, bicyclists, and pedestrians) to promote safe driving in, and around, trucks and motor coaches. We are educating highway users about the operating characteristics and limitations of commercial motor vehicles (CMVs) and developing strategic outreach efforts for specific target audiences.

In addition to the "No Zone" visibility issue, we will increase public awareness of the longer braking distances, weight differentials, acceleration variances, turning radius', structural configurations and basic survivability ratios of CMVs as compared with smaller vehicles. Each provide very good safety reasons for being aware of, and cautious around, large trucks and motor coaches. Knowledge of these characteristics may lead to reduced aggressive driving behavior, increased seatbelt use, and other improved driving practices around CMVs on the highway. In addition, we will provide recommendations to motorists about how to drive around commercial vehicles in real-life driving situations. We will devote significant attention to CMV driver behavior, by identifying and promoting best defensive driving practices, work zone safety concerns and other safe driving skills.

Estimated costs for the various aspects of our fiscal year 2000 "share the road" program include:

Development of new outreach materials	$100,000
Campaign distribution and dissemination	325,000
Research—campaign awareness assessment	75,000
Total estimated costs	500,000

COMMUNICATION, COMPUTER AND INFORMATION SYSTEMS

Question. Please submit budget justification information equivalent to that previously provided by the FHWA for the communication, computer, and information systems components of your program.

Answer.

[Dollars in millions]

1B funding for fiscal year 2000 is as follows:	
ADP Services and System Support	$3.6
ADP Equipment and Supplies	0.2
Requested 1B funding for fiscal year 2001 is as follows:	
ADP Services and System Support	3.6
ADP Equipment and Supplies	0.2
Identify High-Risk intrastate Carriers	0.5

Currently, 20 percent of the U.S. commercial fatalities are caused by intrastate carriers. We cannot meet our 50 percent fatality reduction goal until we focus on intrastate carriers. We have an opportunity to use our substantial resources to identify high risk carriers and help them improve with a relatively small marginal cost.

Including intrastate carriers in our databases does not require a software database modification. It is information system mainframe processing costs that prevent us from identifying the high-risk intrastate carriers, resulting in lives lost. Numerous states are requesting that we identify these high-risk operations using our infor-

mation systems capabilities. However, we contract for mainframe processing and do not have sufficient funding in the budget to support the annual operational mainframe expense of $0.5M associated with maintaining and processing information on these operations.

Background on Current Initiatives

The FMCSA information technology system maintains an electronic motor carrier safety history, and national motor carrier census that systematically identifies "at risk" carriers and provides all of this information electronically to Federal and state field managers and investigators. This creates efficient, focused use of field resources with high quality and uniformity. It also provides an industry awareness that a carrier can no longer hide poor safety performance. Thus, the information systems of the FMCSA are recognized throughout the organization as extremely successful in providing crucial, daily support to motor carrier safety programs. Federal and state usage of the Motor Carrier Management Information System, (MCMIS), SAFETYNET and our field data systems such as CAPRI and ASPEN) increases continuously because these "tools" are an integral part of how the job of motor carrier safety enforcement is performed today. Examples of other enforcement system supported include CaseRite III (prepares legal cases), UFA (Ensures Uniform Fine Assessment across the U.S.), CAPRI (for compliance reviews), ASPEN v2 (for roadside inspection), Inspection Selection System (ISS v2) identifies high risk carrier at the roadside, Past Inspection Query (PIQ) v2 identifies out of service violation and driver log book falsification, and Commercial Drivers License Information System (CDLIS) roadside query v2.

MOTOR CARRIER REGISTRATION

Question. How much is specified within the fiscal year 2001 budget request for the unified motor carrier registration system?

Answer. FMCSA has requested $1.5 million in fiscal year 2001 for the unified motor carrier registration system. An additional $1.5 million has been requested by the ITS Joint Program Office for the project, since this project meets the program goal of the FMCSA and ITS Joint Program Office.

COMPLIANCE REVIEWS

Question. Please present data on the number of compliance reviews performed by federal investigators during each of the last five years. How has the targeting of those audits improved? How does FMCSA know it's conducting the "right" number of compliance reviews?

Answer. During the last five years, compliance reviews by federal investigators have been performed as follows:

Fiscal year	1999	1998	1997	1996	1995
Total reviews conducted	6,240	4,587	4,013	5,414	5,553

Targeting for compliance reviews has improved by using a prioritization listing identified by SafeStat (Safety Status Measurement System) is an automated, data-driven analysis system that is designed to incorporate on-road safety performance information and enforcement history with on-site compliance review information in order to measure the relative safety fitness of interstate motor carriers. SafeStat is designed with four evaluation areas, known as SEAs (safety evaluation areas). These four areas (crash, driver, vehicle, and safety management) fuel the SafeStat score.

Reviews on interstate motor carriers are targeted to the carriers with the highest safety risks—those with high crash rates, driver and vehicle problems or safety management problems. We track the SafeStat list to ensure that the high risk reviews are being conducted. We define the highest risk carrier as those carriers who are in the worst 25th percentile of three or four of the Safety Evaluation Areas. Periodically throughout a six month time frame, we compare the SafeStat list to the Motor Carrier Management Information System database to determine the status.

The focus of compliance reviews is to improve safety performance of problem carriers. The FMCSA is conducting the "right" number of reviews by reviewing the "right" carriers—carriers which pose the highest risk to safety. Reviews on the highest risk carriers are very labor intensive, but provide the greatest safety return on the time invested.

Question. Please present data on the number of compliance reviews performed by state investigators during each of the last five years.

Answer. During the last five years, compliance reviews by state investigators have been performed as follows:

Fiscal year	1999	1998	1997	1996	1995
Total reviews conducted	2,677	2,149	2,900	3,848	4,022

IG AND GAO RECOMMENDATIONS AND CONCLUSIONS

Question. In March 2000, the IG and GAO testified before the House Committee on Appropriations and made recommendations to improve FMCSA activities. Please specify in detail how the Agency will respond to each of their recommendations and conclusions.

Answer. Testimony was presented to the House Committee on Appropriations on March 2, 2000, by Mr. Ken Mead, the Inspector General of the U.S. Department of Transportation, and Ms. Phyllis Scheinberg, the Associate Director of the Transportation Issues, Resources, Community, and Economic Development Division of the U.S. General Accounting Office (GAO). Mr. Mead recognized the progress of FMCSA to increase compliance reviews and increase civil penalties for safety violations. The Agency will continue to move aggressively to strengthen its enforcement program. Mr. Mead recommended a total Federal presence of 126 inspectors at the U.S.-Mexico border, noting that 2 inspectors should be located at each crossing during all hours of operation and additional inspectors should be stationed at high-volume crossings. The OIG's recommendations for staffing levels will be considered when the Federal Motor Carrier Safety Administration (FMCSA) prepares the border staffing standards required in the Motor Carrier Safety Improvement Act of 1999 (MCSIA, Pub.L.106–159). The statutory deadline for completing the staffing standards is December 9, 2000. FMCSA currently plans to hire 20 additional Federal inspectors in fiscal year 2001 for the U.S.-Mexico border, bringing our total contingent to 60. This is very close to the level of Federal inspectors recommended by the May 1999 "Review of the Motor Carrier Program" conducted by former Chairman Norman Mineta for the Department. We are working closely with the States to improve their border infrastructure and increase the number of state personnel they assign to this work. We have seen good progress and believe that these steps, along with the increased number of federal enforcement personnel, will substantially upgrade overall enforcement efforts at our southern border.

Mr. Mead indicated that mandatory shut down of motor carriers that cannot meet basic safety fitness requirements is an essential, potent tool for improving safety. A final rule to implement this provision, which was included in the Transportation Equity Act for the 21st Century (TEA–21) at the request of the Department, is now in the last stages of review. We intend to use our shut down authority as one of our principal methods of ensuring high-risk carriers improve their safety performance. Although it will be more common for us to use our TEA–21 shut down authority, in some cases we will still need to rely on imminent hazard authority for the immediate shut down of motor carriers that pose an extreme safety risk. We agree with the Inspector General that the circumstances which give rise to an imminent hazard should be clarified. The Department proposed a legislative change in the Motor Carrier Safety Improvement Act of 1999 (MCSIA) to facilitate such a clarification. We are making a technical change in our regulations which should make this a much more useful and effective safety enforcement tool.

The Inspector General stated that timely issuance of rulemakings will be essential to achieving our aggressive goals for fatality and injury reductions. FMCSA's new organizational structure establishes a special rulemaking development unit to expedite the rulemaking process. Also, we are filling a Regulatory Ombudsman position to help move forward particularly complex or controversial rulemakings. It should be noted that we are already making progress in rule development, with several major rules in the final stages of consideration.

The Inspector General noted that leadership positions in the Agency are still unfilled. Efforts to fill leadership positions in the organization are progressing well. Secretary Slater is making every effort to select a candidate for Administrator, and the Department has secured approval from the Office of Personnel Management for new senior leadership positions, including four Associate Administrators. But the major accomplishments of current leadership should not be overlooked. It has taken strong, focused leadership to produce the enforcement results we have achieved since last May and to swiftly establish the new FMCSA organization.

Mr. Mead's stated that major improvements are needed in commercial driver licensing (CDL). Last year, the Department proposed legislation to close loopholes

such as granting of special licenses to drivers with suspended licenses, and to include all traffic convictions on a commercial driver's official record. We will be working vigorously to develop the rules necessary to implement MCSIA's CDL reforms and a strong Federal CDL oversight program. We have requested $10 million in fiscal year 2001 to fund a CDL Improvement Pilot Program to speed the exchange of drivers' record data, and have already begun discussions with state motor vehicle administrators and AAMVA Net to address many of the specific issues raised in Mr. Mead's testimony.

The GAO in its testimony recognized the progress of FMCSA on initiatives to reduce truck-related fatalities. In commenting on the FMCSA draft Safety Action Plan, Ms. Scheinberg of the GAO stated that no prioritization has been given to the activities contained in the Plan. FMCSA's final Safety Action Plan is a statement of the agency's top priorities for the next three years. Within the Plan, we have assigned the highest priority to strengthening targeted enforcement, completion of important rulemakings, improving safety information and technology, and increasing safety awareness. Over three quarters of the actions included in the Plan are required by law in appropriations legislation, the MCSIA, TEA–21, or other laws. The Plan sets out only a subset of the agency's overall activities. Many research projects and rulemakings that are underway have not been included. Together we believe the effects of all these actions will materially contribute to the 50 percent fatality reduction goal Secretary Slater has set for our agency and all who play a role in motor carrier safety.

In addition, Ms. Scheinberg recommended a realistic evaluation of whether expected budgetary and human resources will be sufficient to achieve the actions in the Safety Action Plan. The Department has recommended increases in our funding and personnel levels in the fiscal year 2001 budget, and we believe these are appropriate and adequate to carry out the Plan in the near term.

The GAO concluded that a comprehensive strategy is needed to achieve the Secretary's goal to reduce bus and truck fatalities by 50 percent. The agency has established targets for fatality reduction for each year to achieve this goal by the end of calendar year 2009. We believe achieving the goal will be the result of the aggregation of our efforts in targeted enforcement, data improvements, new technology, safety awareness, and strengthening equipment and operating standards along with the concerted efforts of all segments within the motor carrier industry and safety community.

COMPLIANCE REVIEWS/ENFORCEMENT CASES

Question. How many compliance reviews, enforcement cases closed with action (e.g., civil penalty), compliance orders, operations out-of-service orders, and consent orders were conducted or issued under each of the State Directors during each of the last three years?

Answer.

Div	Compliance reviews	Closed W/ENF	Compliance orders	Consent orders	OOS
Fiscal year 1997:					
AK	6	10	.....	.....	.....
AL	119	35	.....	.....	1
AR	86	30	1	.....	.....
AZ	65	14	.....	.....	.....
CA	175	89	.....	.....	.....
CO	205	37	2	2	.....
CT	124	50	.....	8	.....
DC	48	4	.....	.....	1
DE	20	16	2	1	.....
FL	76	29	.....	.....	.....
GA	271	110	.....	.....	.....
HI	.....	.....	.....	.....	.....
IA	45	37	2	3	.....
ID	44	24	.....	.....	.....
IL	251	89	6	6	2
IN	222	58	4	.....	.....
KS	24	16	.....	1	.....

Div	Compliance reviews	Closed W/ENF	Compliance orders	Consent orders	OOS
KY	168	30	.....	.....	.....
LA	90	31	.....	.....	.....
MA	82	30	.....	2	.....
MD	47	34	5	2	.....
ME	26	25	.....	4	.....
MI	270	108	4	1	.....
MN	381	75	2	1	.....
MO	275	34	.....	1	.....
MS	77	30	.....	.....	.....
MT	47	31	1	1	.....
NC	156	47	.....	.....	.....
ND	43	52	1	5	.....
NE	63	26	.....	3	.....
NH	16	3	.....	1	.....
NJ	274	47	.....	7	.....
NM	137	17	.....	.....	.....
NV	33	9	.....	.....	.....
NY	190	64	.....	9	.....
OH	835	79	1	5	0
OK	128	48	2	.....	.....
OR	200	32	4	1	.....
PA	79	74	2	.....	.....
RI	31	17	.....	2	.....
SC	87	24	7	.....	.....
SD	38	14	.....	1	.....
TN	101	29	.....	.....	.....
TX	422	187	1	.....	.....
UT	99	2	.....	.....	.....
VA	53	21	.....	.....	.....
VT	22	16	.....	2	.....
WA	252	93	2	14	.....
WI	354	86	1	3	.....
WV	26	11	.....	.....	.....
WY	30	7	1	.....	.....
Totals 1997	6,913	2,081	51	86	4
Fiscal year 1998:					
AK	.....	2	.....	.....	.....
AL	139	57	.....	.....	.....
AR	87	36	.....	1	.....
AZ	77	28	.....	.....	.....
BC	1	.....	.....	.....	.....
CA	272	88	.....	.....	.....
CO	172	59	.....	5	.....
CT	95	44	.....	4	1
DC	15	13	.....	.....	.....
DE	21	21	.....	.....	.....
FL	103	29	.....	.....	.....
GA	229	96	.....	1	.....
HI	7	1	.....	.....	.....
IA	38	36	.....	2	.....
ID	38	25	.....	2	.....
IL	278	74	.....	3	.....
IN	200	42	1	7	2
KS	24	25	1	1	.....
KY	120	33	.....	.....	.....

Div	Compliance reviews	Closed W/ENF	Compliance orders	Consent orders	OOS
LA	100	19	.....	.....	.....
MA	62	20	.....	6	.....
MD	24	36	2	.....	.....
ME	8	16	.....	.....	.....
MI	267	69	.....	1	.....
MN	374	92	.....	1	.....
MO	146	54	1	.....	.....
MS	104	32	.....	1	.....
MT	52	25	1	2	.....
NC	239	54	.....	.....	.....
ND	41	39	.....	4	.....
NE	51	11	.....	.....	.....
NH	27	6	.....	1	.....
NJ	215	59	1	5	.....
NM	132	32	.....	.....	.....
NV	58	10	.....	.....	.....
NY	183	52	2	14	.....
OH	769	67	.....	3	.....
OK	150	40	.....	.....	.....
OR	150	25	4	.....	.....
PA	73	62	1	1	1
RI	6	7	.....	.....	.....
SC	122	38	6	.....	.....
SD	37	21	.....	.....	.....
TN	112	28	.....	.....	.....
TX	510	306	.....	.....	.....
UT	87	14	.....	.....	.....
VA	75	37	3	1	.....
VT	25	32	.....	5	.....
WA	180	64	1	7	.....
WI	339	90	.....	.....	.....
WV	30	12	.....	.....	.....
WY	72	12	1	4	1
Totals 1998	6,736	2,190	25	82	5
Fiscal year 1999:					
AK	1	2	.....	.....	.....
AB	1	.....	.....	.....	.....
AL	146	28	.....	.....	.....
AR	86	40	.....	.....	.....
AZ	66	71	.....	.....	.....
BC	1	.....	.....	.....	.....
CA	378	112	.....	.....	.....
CH	2	.....	.....	.....	.....
CO	221	91	.....	2	.....
CT	117	40	.....	.....	.....
DC	33	15	.....	3	.....
DE	.....	37	27	1	.....
FL	150	42	.....	.....	.....
GA	408	174	.....	.....	.....
HI	3	4	.....	.....	.....
IA	80	37	.....	.....	.....
ID	60	18	.....	.....	.....
IL	250	54	2	2	.....
IN	304	58	1	3	.....
KS	56	15	.....	.....	.....

Div	Compliance reviews	Closed W/ENF	Compliance orders	Consent orders	OOS
KY	336	37	2	1	
LA	109	28			
MA	74	34		2	
MD	49	38	1		
ME	3	5			
MI	249	67		6	
MN	454	105			
MO	309	86			
MS	222	32			
MT	71	28		2	
NC	261	57		1	
ND	45	31			
NE	73	12			
NH	49	9			
NJ	268	54			
NM	154	41	4		
NV	74	10			
NY	213	86	2	4	
OH	643	88	1	4	
OK	185	46	1	1	
ON	1				
OR	214	25			
PA	290	175			1
RI	45	11			
SC	127	45	3		
SD	62	28			
TA	1				
TN	194	31			
TX	715	226			
UT	146	13			
VA	107	59		2	
VT	39	19			
WA	240	42			
WI	362	109	2	2	
WV	94	41			
WY	39	9			
Total	8,917	2,555	20	35	1

CVO AND PRISM

Question. Given the progress made under the PRISM, why are additional staff requested at this time?

Answer. Additional staff are requested for PRISM to be able to manage the rapid influx of new states interested in participating in the program and ensure consistent program implementation nationwide. Each new state that joins the program requires ongoing program guidance and technical assistance throughout the two year development phase of the program. Resources are needed to conduct training for each new state, assist states in the development of their implementation plans, and provide technical assistance when problems arise. In addition, as each state completes its two year program development, staff are need to conduct program reviews to monitor state implementation and ensure the terms of the grant agreement are met and maintain a level of effort in carrying out the program. Finally, technical staff will be needed to review, assess, and make improvements to the information and communication systems that support the program and ensure they provide the flexibility needed to address state needs and, if necessary, examine emerging technologies that could improve program delivery at both the Federal and state level.

Question. Please discuss the challenges, status, opportunities and issues associated with PRISM.

Answer. Twelve states are currently participating in the PRISM program. Of these, the original pilot states are Iowa, Colorado, Indiana, Minnesota, and Oregon. The remaining seven states are Pennsylvania, Connecticut, Maine, Rhode Island, Tennessee, Georgia, and Kentucky. In addition, there are twelve other states (Arizona, South Carolina, Alaska, New Mexico, North Carolina, Ohio, Utah, Idaho, Wyoming, New York, Illinois, and South Dakota) which have expressed interest in participating in the program, and the number continues to expand.

Every participating state has entered into a grant with the Federal Motor Carrier Safety Administration (FMCSA) to implement PRISM. Each of the five pilot states have implemented the program and are operational. The remaining states have received training on the program and are in various stages of the implementation process, which generally takes anywhere from 18–24 months to complete. During this period, states must modify their registration systems to be PRISM compliant, establish and update a complete census of all interstate carriers, establish automated data improvement procedures for both registration and at the roadside enforcement, and provide training to state registration and enforcement personnel.

Pennsylvania has developed its implementation plan and expects to be operational by October of this year. Maine's implementation plan has recently been approved and the implementation process is expected to begin in April. Rhode Island, Georgia, and Arizona are currently developing their implementation plans. Connecticut, Tennessee, and Kentucky have not yet developed their implementation plans, but are expected to do so within the next 3–4 months.

PRISM provides many opportunities to improving highway safety. These include:

—establishing accountability for safety by identifying the carrier responsible for the safe operation of every commercial vehicle on the road through the U.S. DOT number;

—improving overall data quality by establishing and updating the current carrier census annually;

—establishing a link between motor carrier's registration and safety fitness;

—expanding FMCSA's ability to reach a great many more carriers through issuance of Warning Letters;

—accurately identifying high risk carriers based on actual over the road performance through SafeStat, the algorithm developed under the PRISM pilot program;

—providing equitable treatment to all interstate carriers.

There are, however, challenges and issues associated with full deployment of the PRISM program. First, in most instances, new states must pass legislation that will allow them to apply state vehicle registration sanctions based upon a Federal Operations Out-of-Service Order. All participating states have not yet passed this legislation.

Second, the FMCSA has experienced difficulty in issuing OOSOs. The term imminent hazard, as defined prior to the new Motor Carrier Safety Improvement Act, was operationally unworkable and thus not effective as an enforcement tool. Clearly, without the issuance of out of service orders, PRISM cannot be as effective as it was originally designed to be. Under PRISM, states cannot suspend and/or revoke plates of a motor carrier unless the FMCSA first issues an operations-out-of-service order (OOSO) to the carrier.

In the past, the FMCSA has had difficulty is issuing out-of-service orders. New policy directives encourage increased enforcement on unsafe carriers. The new legislative definition for imminent hazard will provide us with more effective enforcement tools to remove unsafe carriers from the highways. Question. How many states are participating in the program now?

Answer. Twelve states are currently participating in the program. The states are Iowa, Colorado, Indiana, Minnesota, Oregon, Pennsylvania, Connecticut, Maine, Rhode Island, Tennessee, Georgia, and Kentucky.

Question. What is the status of each state's program?

Answer. Every state that is a member of PRISM has entered into a grant with the Federal Motor Carrier Safety Administration (FMCSA). Each of the five pilot states (Iowa, Colorado, Minnesota, Oregon, and Indiana) have implemented the program and are operational. The remaining states have received training on the program and are in various stages of the implementation process which generally takes anywhere from 18–24 months to complete. During this period, states must modify their registration systems to be PRISM compliant, establish and update a complete census of all interstate carriers, establish automated data improvement procedures for both registration and at the roadside enforcement, and provide training to state registration and enforcement personnel.

Pennsylvania has developed its implementation plan and expects to be operational by October of this year. Maine's implementation plan has recently been approved

and the implementation process is expected to begin in April 2000. Rhode Island and Georgia are currently developing their implementation plans. Connecticut, Tennessee and Kentucky have not yet begun developing their implementation plans but are expected to do so within the next 3–4 months.

CVO AND PRISM

Question. How many additional states want to participate?

Answer. Twelve additional states (Arizona, South Carolina, Alaska, New Mexico, North Carolina, Ohio, Utah, Idaho, Wyoming, New York, Illinois, and South Dakota) have expressed interest in participating in the program.

Question. Please break out in detail how the PRISM monies are expected to be allocated during fiscal year 2000. Please specify the nature and amount of each research project, training activity, outreach function, and state deployment. For the fiscal year 2001 request, please provide comparable data wherever possible. Please document how program continuity is achieved.

Answer.

ESTIMATED ALLOCATION OF PRISM FUNDS

Activity	Fiscal years—	
	2000	2001
RESEARCH	$500,000	$500,000
INFORMATION SYSTEM SUPPORT AND IMPROVEMENTS	875,000	1,200,000
TRAINING AND OUTREACH	800,000	1,000,000
STATE DEPLOYMENT	2,700,000	2,300,000
TOTAL	4,875,000	5,000,000

In fiscal year 2000, the research allocation will be used to conduct a technology assessment of current PRISM hardware and software and make enhancements to the SafeStat methodology; fiscal year 2001 funds will be used to identify data quality and timeliness issues and develop solutions address them.

To make improvements to the program, we plan to allocate $875,000 in fiscal year 2000, and increase the allocation in fiscal year 2001. These funds will be used to identify and resolve all issues related to both Federal and state information systems that affect PRISM, updating the national carrier census file to reflect state registration data, and improving system specifications for States.

Approximately $800,000 will be spent on training and outreach in fiscal year 2000 and plan to increase it to $1 million in fiscal year 2001 to accommodate an anticipated increase in PRISM states next year. These funds will support two-day training for all new PRISM States, briefings given to new states interested in joining the program, and development and publication of a PRISM newsletter and other marketing materials for use at public exhibits.

Finally, State deployment is the core program. New PRISM states require approximately $450–500,000 to implement the program. Based on this figure, we have set aside $2.7 million for new State deployment in fiscal year 2000 (5–6 States) and $2.3 million (3–4 states) for fiscal year 2001.

To ensure continuity, or uniformity, the Federal Motor Carrier Safety Administration (FMCSA) has developed a PRISM Implementation Guide for all participating states. The Guide provides a list of all registration and enforcement requirements that all PRISM states must meet in order to obtain PRISM funds. States use the Guide to help develop detailed implementation plans on not only how they will carry out each requirement, but also the anticipated costs. The plan will be used to help develop the grant to that state. Implementation plans must be completed and approved prior to entering into a grant agreement with the FMCSA. The FMCSA then uses these plans to monitor state compliance with the program requirements.

IVI TECHNOLOGY

Question. Why did FMCSA decide to request additional staff to support the IVI given the uncertainty as to whether this initiative will be reauthorized in the next highway bill?

Answer. The success of IVI and other technologies is critical to DOT and FMCSA achieving the goal of reducing the number of commercial truck-related fatalities by 50 percent over the next ten years. Thus, FMCSA is requesting additional staff to

support the IVI to provide the technical and program support necessary to ensure the success of the IVI's commercial vehicle platform. This platform will test and evaluate on-board safety systems and technologies designed to reduce commercial motor vehicle crashes and enhance commercial vehicle and driver safety. These involve complex, multi-year on-road operational tests such as the ones planned for the IVI commercial vehicle platform in the areas of drowsy driver and electronically controlled brakes. Additionally, the added staff will test and evaluate new technologies for 2010 as well as develop ways to use on-board safety information for roadside enforcement.

CVO AND PRISM

Question. Please discuss how CVO could be used to further strengthen the efficiency and effectiveness of federal and state enforcement and compliance activities if additional funds were provided for this purpose in the fiscal year 2001 budget.

Answer. In fiscal year 2001, $500 thousand is requested within FHWA's R&D CVO program to support new technology for enforcement and compliance, $150 thousand above the fiscal year 2000 level. These funds will be used to assess new and existing technologies in a timely fashion that will reduce crashes and improve: (1) the identification of high-risk motor carriers, vehicles, and drivers; (2) the enforcement of, and compliance with, performance-based regulations; and (3) the efficiency and accuracy of safety data collection and access at the roadside.

REAR-END COLLISION AVOIDANCE TECHNOLOGY

Question. How are you responding to the January 1995 NTSB recommendation to sponsor fleet testing of rear-end collision avoidance technology and incorporate testing results into demonstration and training programs?

Answer. The IVI program recently awarded Volvo Trucks North America a cooperative agreement to test the operational effectiveness of the bundled advanced safety system of Collision Warning System (CWS), Adaptive Cruise Control (ACC) and Electronically Controlled Brake System (EBS). The advanced safety system bundle is expected to enable truck drivers to reduce the number and severity of tractor-trailer accidents specifically associated with rear end collisions (forward crash) and lane change collisions. This project involves 100 new Volvo tractors operated by USXpress Leasing Inc. and will operationally test and evaluate the advanced safety systems in revenue generating, on road operations. The results of this operational test will be disseminated widely through reports and outreach activities. Significant market penetration of this technology will also be assisted by working with motor carriers to increase technology transfer and supporting tax incentives for the voluntary adoption of this type of on-board safety technology.

REGULATORY AND STATUTORY RESPONSIBILITIES

Question. Do you plan to establish a Motor Carrier Safety Advisory Committee in the near future? If not, please explain why. If you do, please discuss the scope and nature of the responsibilities and topics to be addressed. Would funds be needed in fiscal year 2001 to assist this advisory committee, especially if it is requested to assist FMCSA in addressing the regulatory backlog?

Answer. FMCSA has no objection to establishing a Motor Carrier Safety Advisory Committee. We are in the very preliminary stages of internal discussions on its scope and funding requirements. At this time, we do not believe any additional funds are necessary for this activity in fiscal year 2001.

Question. The Rail Safety Advisory Committee has helped FRA address more than 10 regulatory challenges or tasks during the last few years. What are the pros and cons of establishing a similar group to help the FMCSA deal with its regulatory backlog?

Answer. An advisory committee could enhance communication between FMCSA and safety organizations, industry, labor, enforcement officials, state and local governments, and other stakeholders in motor carrier safety. It could foster discussion and cooperation among stakeholders and the agency and help to disseminate information about new regulatory and safety initiatives. In some cases, an advisory committee could help facilitate the rulemaking process by bringing together appropriate interests to arrive at a consensus solution.

Establishing fair advisory committee representation may be a more manageable process for the railroad industry given the fact there are fewer than ten major railroads and approximately 500 short-line railroads in the U.S. Ensuring balanced committee representation for the large and extremely diverse motor carrier safety community could be more daunting. There are literally hundreds of thousands of motor carriers currently operating in the U.S. Also, the consensus process may not

be the most timely or successful approach in some controversial rulemakings where affected interests are deeply divided on the issues. The travel and administrative costs for an advisory committee can be quite significant, as well.

Question. Please list each of the motor carrier safety provisions of ISTEA or TEA–21 that have not yet been implemented and indicate your time table for completing or fulfilling legislative intent. Please document how your fiscal year 2001 budget request will help accomplish or implement each of these provisions.

Answer. This information is provided in the tables below:

	Expected completion date	Funding
ISTEA requirement		
Funding Sec. 4007(a) Training for Entry-Level Drivers of CMVs.	NPRM Summer 2000	FMCSA staff resources.
Sec. 4007(b) Training for Operators and Training Instructors in Multiple Trailer Combination Vehicles.	NPRM Fall 2000	FMCSA staff resources.
TEA 21 Requirement		
Sec. 4004 Information availability and privacy protection policy.	Fall 2000	FMCSA staff resources.
Section 4008 Requirements for Operators of Small Passenger-Carrying Commercial Motor Vehicles.	Summer 2000	FMCSA staff resources.
Section 4008 Definition of CMV	Summer 2000	FMCSA staff resources.
Section 4009 Procedures—Unsatisfactory Safety Ratings	Summer 2000	FMCSA staff resources.
Section 4018 Insulin Treated Diabetes Mellitus Report	Summer 2000	FMCSA staff resources.
Section 4019 Benefits of Graduated Licensing	December 2000	Addressed with fiscal year 2000 funds
Section 4020 Post-accident Alcohol Testing Report	Summer 2000	Addressed with fiscal year 2000 funds
Section 4022 Improved Flow of History Driver History Pilot Program.	December 2002	$10 million RABA request for CDL improvements will help fund the driver history pilot program.
Section 4023 Study of effectiveness of existing statutory employee protections.	June 2000	Addressed with fiscal year 2000 funds.
Section 4024 Interstate School Bus Transportation Safety Rulemaking.	ANPRM December 2000	FMCSA staff resources.
Section 4026 Assessment of Shipper Contributions to Violations of Safety Regulations.	Summer 2000	FMCSA staff resources.
Section 4014 Safety Performance History of New Drivers	SNPRM July 2000. Final Rule January 2001.	FMCSA staff resources.
Section 4032 Study on the effects of MCSAP grant reductions.	June 2000	Addressed with fiscal year 2000 funding.

Question. How do you propose to implement each of these remaining provisions?

Answer. The information is provided in the table below:

	Implementation
ISTEA Requirement	
Training for Entry-Level Drivers of CMVs	An NPRM has been drafted and is under review within the agency.
Training for Operators and Training Instructors in Multiple Trailer Combination Vehicles.	The agency is working on the preliminary regulatory evaluation to assess the costs and benefits of the rulemaking. An NPRM will be drafted later this year.
TEA 21 Requirement	
Information availability and privacy protection policy.	FMCSA will examine other government information and privacy policies, request stakeholder comment, and formulate and notify the public of its policy.
Requirements for Operators of Small Passenger-Carrying Commercial Motor Vehicles.	A final rule is under review within the Department. This rule has been combined with ''Definition of CMV.''

	Implementation
Definition of CMV	A final rule is under review within the Department. This rule has been combined with ''Requirements for Operators of Small Passenger-Carrying Commercial Motor Vehicles.''
Procedures-Unsatisfactory Safety Ratings	A final rule is under review at OMB.
Insulin Treated Diabetes Mellitus Report	An assessment of the feasibility of developing a protocol has been conducted. The agency is preparing a report to Congress and evaluating alternatives for implementation.
Benefits of Graduated Licensing	Focus groups have been conducted and a survey instrument has been developed. The agency is seeking OMB approval for conducting the survey.
Post-accident Alcohol Testing Report	A draft report is in development.
Improved Flow of Driver History Pilot Program	A pilot program will be conducted to determine the extent data covered in Section 4022(a)(2)(A), such as failures to appear, should be included in information systems. Costs, benefits, and methods for exchange of driver safety data are being evaluated in implementation of state record exchange requirements of the Motor Carrier Safety Improvement Act of 1999.
Study of effectiveness of existing statutory employee protections.	A draft study report is in review and the agency plans to submit a final report to Congress this summer.
Interstate School Bus Transportation Safety Rulemaking.	An ANPRM is in development.
Assessment of Shipper Contributions to Violations of Safety Regulations.	A study of the role of shippers and other non-carrier entities in encouraging violations of motor carrier safety regulations has been conducted. The agency is reviewing policy options, including submission of an implementation plan to Congress.
Safety Performance History of New Drivers	A supplemental NPRM has been drafted in response to comments for the Small Business Administration and concerns expressed by employers about liability for releasing personal information about employees.
Study on the effects of MCSAP grant reductions	A study has been performed and a draft report is in development.

SECTION 4019 OF TEA–21

Question. What is FMCSA doing to implement Section 4019 of TEA–21, which requires the Secretary to determine if the current system for commercial driver testing is adequate and to identify ways to improve testing and licensing standards? How much is in your budget request to accomplish this task?

Answer. The FMCSA through a cooperative agreement with the American Association of Motor Vehicle Administrators (AAMVA) is reviewing the current CDL testing process. Over the past 18 months, the AAMVA in cooperation with the FMCSA and the National Highway Traffic Safety Administration (NHTSA), has conducted a series of meetings and forums with state licensing agency administrators, state test experts (chief examiners) and the commercial motor vehicle industry (bus and truck carriers, training schools and insurance companies) to identify perceived problems with the testing process. AAMVA will use this information in an 18-month in-depth study to review and revise, as needed, the current CDL skills tests. AAMVA will conduct field testing and revise, as needed, the current CDL examiner's manual.

The FMCSA is also conducting a feasibility study to identify the costs and benefits of a graduated CDL. To accomplish this, focus groups have been held and a survey will be distributed later this year to state, industry, insurance, driver, safety and other interested groups.

No new funding is being requested in our budget request to accomplish these tasks. However, if a graduated CDL is feasible, we may request funding in the future for implementation.

SECTION 4026 OF TEA–21

Question. What is the status of the assessment required under Section 4026 of TEA–21? What are you doing to further the development of a plan and an enforcement strategy to deal with shippers and others encouraging violation of motor carrier safety regulations?

Answer. The report on the Assessment of Non-Carrier Encouraged Violations of Motor Carrier Safety Regulations is currently under review by FMCSA. The purpose of the study was to examine the extent to which commercial shippers and others involved in interstate commerce impose demands for the timely delivery of goods that may result in commercial motor vehicle operators' violation of Federal Motor Carrier Safety Regulations, including commercial driver hours of service (HOS).

The report recommends various options, which include legislative, regulatory, and non-regulatory actions (e.g., education, outreach, encouragement of industry best practice standards), to deal with shippers and others encouraging violation of motor carrier safety regulations.

The findings of the study and resultant proposals will be forwarded to the Congress.

REGULATORY AND STATUTORY RESPONSIBILITIES

Question. Please describe what FMCSA is doing to implement Sections 4018, 4020, 4022 and 4026 of TEA–21? What is the status, progress made or results of each of those efforts? Please specify the amount set aside in your fiscal year 2000 spending plan to implement each of those sections.

Answer. Section 4018 of TEA–21 directs FHWA (now FMCSA) to determine if it is practical and cost-effective to have a program that allows individuals with insulin-treated diabetes mellitus (ITDM) to operate commercial motor vehicles in interstate commerce. This summer the FMCSA will forward to the Congress, a report on the feasibility of allowing ITDM drivers to operate CMVs in interstate commerce. This report include a description of the components of a screening protocol. The FMCSA's fiscal year 2000 and 2001 budgets do not include a specific set aside for implementing section 4018 of TEA–21.

To implement Section 40201, FHWA (now FMCSA) published, in the Federal Register of January 27, 1999, a request for comments on the feasibility of using law enforcement officers to perform post-accident alcohol testing currently required of industry under the provisions of 49 CFR 382.303. Comments have been received from the law enforcement community, motor carrier industry, and other interested parties. The required report to Congress is now being prepared. The motor carrier industry noted that, in many instances, it is impossible for them to have the testing performed within the required two-hour time period. However, there was virtually unanimous agreement among law enforcement respondents that no testing can be performed in the absence of "probable cause." Since it appears that there are serious obstacles to non-probable cause testing by law enforcement officials, it is anticipated that the current provisions of 49 CFR 382.303 will remain in effect.

We have developed technical capabilities to support a plan we are finalizing to conduct a pilot program with one or more states to respond to Section 4022(a)(1) and (2)(A). The remainder of Section 4022 is being incorporated into our efforts to satisfy the requirements of Section 221 of the Motor Carrier Safety Improvement Act of 1999. To date, we have allocated no fiscal year 2000 funds for this project.

A report on the analysis required by Section 4026, on the Assessment of Non-Carrier Encouraged Violations of Motor Carrier Safety Regulations, is currently under review by FMCSA. The purpose of the study was to examine the extent to which commercial shippers and others involved in interstate commerce impose demands for the timely delivery of goods that may result in commercial motor vehicle operators' violation of the Federal Motor Carrier Safety Regulations (FMCSRs), including driver's hours of service (HOS).

The report recommends various options and policy options, which include legislative, regulatory, and non-regulatory actions (e.g., education, outreach, encouragement of industry best practice standards) to deal with shippers and others encouraging violations of the FMCSRs. The findings of the study and an agency proposal will be forwarded to the Congress. We have set aside no fiscal year 2000 funds to implement this section. We do, however, plan to allocate $150,000 for such an effort in fiscal year 2001.

Question. If there is a specific funding set aside in the fiscal year 2001 budget to implement each of these sections, please list the amounts.

Answer. There are no specific funding set asides in the fiscal year 2001 budget for any of these activities. Staff resources are associated with each of these activities and the costs associated with the assigned staff are attributable to these initiatives.

REGISTRY OF MEDICAL EXAMINERS

Question. Have you requested funds to begin to establish a registry of medical examiners in fiscal year 2001? If not, is this a worthwhile activity or is the idea premature? How much would be required to initiate this project?

Answer. No. The FMCSA will publish a notice of proposed rulemaking (NPRM) this fall, requesting comments on its proposal to link the driver physical qualification determination with the commercial driver's license (CDL) process. After the FMCSA has reviewed the comments to that docket, it will determine if a registry of medical examiners should be established and what it would cost to initiate and maintain such a registry.

REGULATORY DOCKETS

Question. Please list each of the open regulatory dockets pertaining to motor carriers.

Answer. The following table lists each open regulatory docket of the Federal Motor Carrier Safety Administration. We have included regulatory identification numbers for each rulemaking action; both the old RINs assigned when the rules were initiated by the FHWA and the new RINs assigned for the FMCSA. We have also included a brief description of each rulemaking action and the current status of the open dockets.

REGULATORY ACTIONS

Question. Please list each of the regulatory actions taken during fiscal year 1999 and thus far during fiscal year 2000.

Answer. The following table lists all rulemaking notices published in fiscal year 1999 and in fiscal year 2000, as of May 19, 2000. The table presents the title of the rulemaking notice, identifies the type of rulemaking action, and provides the Federal Register cite for reference.

Title of rulemaking action	Type of action	Federal register cite
Fiscal Year 1999 Rulemakings		
Safety Fitness Procedures	Final rule, corrections	63 FR 62957; November 10, 1998.
Federal Motor Carrier Safety Regulations; Waivers, Exemptions, and Pilot Programs; Rules and Procedures.	Interim final rule; request for comments.	63 FR 67600; December 8, 1998.
General Requirements Inspection, Repair, and Maintenance; Intermodal Container Chassis and Trailers.	Advance notice of proposed rulemaking; request for comments.	64 FR 7849; February 17, 1999.
Motor Carrier Safety Assistance Program (MCSAP)	Notice of proposed rulemaking (NPRM); request for comments.	64 FR 11414; March 9, 1999.
Parts and Accessories Necessary for Safe Operation; Lighting Devices, Reflectors, and Electrical Equipment.	Final rule	64 FR 15588; March 31, 1999.
Qualifications of Motor Carriers to Self-Insure Their Operations and Fees to Support the Approval and Compliance Process.	Notice of proposed rulemaking (NPRM); request for comments.	64 FR 24123; May 5, 1999.
Safety Fitness Procedures	Notice of proposed rulemaking (NPRM); request for comments.	64 FR 44460; August 16, 1999.
Parts and Accessories Necessary for Safe Operation; Rear Impact Guards and Rear Impact Protection.	Final rule	64 FR 47703; September 1, 1999.
Commercial Driver Disqualification Provision	Final rule	64 FR 48104; September 2, 1999.
Federal Motor Carrier Safety Regulations; Definition of Commercial Motor Vehicle.	Interim final rule; request for comments.	64 FR 48510; September 3, 1999.
Federal Motor Carrier Safety Regulations; Requirements for Operators of Small Passenger-Carrying Commercial Motor Vehicles.	Notice of proposed rulemaking; request for comments.	64 FR 48518; September 3, 1999.

Title of rulemaking action	Type of action	Federal register cite
Fiscal Year 2000 Rulemaking Notices		
Organization and Delegation of Powers and Duties; Recission of Delegation of the Administrator, Federal Highway Administration and Redelegation to Director, Office of Motor Carrier Safety.	Final rule	64 FR 56270; October 19, 1999.
Organization and Delegation of Powers and Duties; Redelegation to the Director, Office of Motor Carrier Safety.	Final rule	64 FR 58356; October 29, 1999.
Motor Carrier Safety Regulations	Final rule	64 FR 58355; October 29, 1999.
Rules of Practice for Motor Carrier Proceedings; Violations of Commercial Regulations.	Final rule	65 FR 7753; February 16, 2000.
Safety Fitness Procedures; Safety Fitness Rating Methodology.	Final rule	65 FR 11904; March 7, 2000.
Motor Carrier Safety Assistance Program	Final rule	65 FR 15092; March 21, 2000.
Hours of Service of Drivers	NPRM	65 FR 25540; May 2, 2000.
Federal Motor Carrier Safety Regulations: Technical Amendment.	Final Rule	65 FR 25285; May 1, 2000.

MOTOR CARRIER RESEARCH AND TECHNOLOGY

Question. In House Report 106–180, DOT was directed to improve the budget justification for the motor carrier research area. The House Committee stated that: "Future budget requests should delineate the specific projects that will be funded and the exact amount for each project, similar to the format used by the Federal Railroad Administration's next generation high-speed rail program." How was this requirement implemented? How do you propose to further improve the fiscal year 2002 research budget justification?

Answer. The FMCSA (formerly, FHWA's Office of Motor Carriers) has significantly improved its budget requests over the past two years, and will make further improvements in the fiscal year 2002 Motor Carrier Research and Development (MCR&D) budget request. These improvements are summarized below:

Fiscal year 2000.—The MCR&D program, and budget justification, were reorganized by focus areas to provide better information on the safety problems targeted by MCR&D projects.

Fiscal year 2001.—In accordance with the Congressional request and in a similar manner to the Federal Railroad Administration, FMCSA provided, for each of nine focus areas, a matrix listing all projects receiving funding over three years (fiscal years 1999, 2000, and 2001) and the amount(s) received or requested. A summary chart compared total funding levels for each focus area across the three years. Each focus area write-up included information on the most important FMCSA programmatic safety goals being addressed (i.e., FMCSA Safety Action Plan items), and each project receiving fiscal year 2000 and/or fiscal year 2001 funding was described.

Fiscal year 2002.—The FMCSA MCR&D budget justification will be expanded by the inclusion of paragraph summaries of all projects receiving funding in the three years addressed (fiscal years 2000, 2001, and 2002). In addition, more detailed explanations and justifications will be provided for new fiscal year 2002 initiatives and for major changes in focus area funding.

SCHOOL TRANSPORTATION SAFETY AND OPERATION RESPOND

Question. In the fiscal year 2000 conference report, the conferees stated that: "$200,000 shall be available to conduct the school transportation safety study and $350,000 shall be available for Operation Respond." How much money was allocated for each of these activities in fiscal year 1999, how much is planned in fiscal year 2000, and how much is requested for fiscal year 2001. What progress has been made in implementing each directive?

Answer.

	Fiscal years—		
	1999	2000	2001
School Transportation Study (NHTSA)	50,000	200,000	.....
Operation Respond (FHWA)	375,000	350,000	.....

FMCSA did not include funding for either of these initiatives in the proposed fiscal year 2001 budget.

The Transportation Safety Board (TRB) School Transportation Safety study mandated in TEA–21 (Sec. 4030) began with the award of $50,000 from NHTSA to TRB at the end of fiscal year 1999. An additional $200,000 of fiscal year 2000 funds transferred from FHWA to NHTSA is currently in the award process. A final amount of $200,000 is planned to be awarded in fiscal year 2001. Currently TRB is finalizing the selection of committee members. The first committee meeting will be held at the beginning of June. The study is expected to be completed by October 2001.

The funds for Operation Respond have been allocated to support a detailed Statement of Work (SOW) recently completed and agreed to by FMCSA, FHWA and Operation Respond. The Tasks in the SOW include:

—building an internet based version of the Operation Respond Emergency Information System (OREIS);

—building an interface with intermodal technology initiatives being conducted by FHWA;

—continued integration and installation of OREIS into two additional Traffic Management Centers (TMCs); and

—to incorporate OREIS into select border crossing sites on the Northern and Southern border, to promote the safe movement of vehicles across our international borders.

SMART COMMERCIAL DRIVER'S LICENSE

Question. In the fiscal year 2000 conference report, the Committee requested that FMCSA provide up to $1,000,000 for the testing and development of a smart commercial driver's license, utilizing smart card and biometric elements to enhance safety and efficiency. What has FMCSA done to implement the objective? How much will be allocated during fiscal year 2001 on those activities?

Answer. The FHWA began to implement this objective in 1996 with a study of the feasibility of smart cards for commercial drivers licenses. The study's final report concluded that: "Analysis shows that enhancing the CDL is most feasible through the use of a smart card for all drivers, not only commercial drivers. However, smart card tracking of hours of service was not found to be institutionally feasible. Although beneficial to law enforcement, smart card tracking of hours of service could be effectively opposed by drivers and carriers at several stages of system implementation." The American Association of Motor Vehicle Administrators is working to standardize smart card technology. One Canadian province is scheduled to issue smart cards beginning in calendar year 2001.

Currently, the FMCSA is evaluating the best biometric elements to uniquely identify a commercial driver. The FMCSA has a Cooperative Agreement with the California Department of Motor Vehicles to determine both the optimum combination of fingerprint and facial images to best detect license fraud and the optimum communication protocol to exchange fingerprint images between states electronically. California is one of 3 states which will collect a total of 32,000 sample digital facial images and sets of fingerprints from volunteers. A random sample of records will be duplicated and sent to vendors to see if they can identify the duplicate records. The project started in fiscal year 1999 with $100,000 in research funds. Funding for fiscal year 2000 is $100,000 in Motor Carrier Safety Assistance Program funds and $100,000 Intelligent Transportation Systems/Commercial Vehicle Operations funds. The project is scheduled for completion in October, 2001. No further funding for fiscal year 2001 is planned.

NADS

Question. Please discuss FMCSA's expected involvement in the NADS during fiscal year 2000 and fiscal year 2001.

Answer. During fiscal years 2000 and 2001, FMCSA is conducting a National Advanced Driving Simulator (NADS) Utilization Study. The NADS Utilization Study will identify potential, but realistic, uses of the NADS as a tool to help FMCSA accomplish its motor carrier safety research goals and objectives in areas such as fatigue, hours of service, impact of drugs and alcohol on driver performance, medical conditions, driver selection, driver performance evaluation and enhancement, assessment of technologies for improving CMV driver safety, and refinement of simulation technology for driver training and licensing purposes. Specifically, this study will: (1) review the goals and planned projects of the Motor Carrier Research and Development (MCR&D) program and identify potential contributions of advanced simulation research; (2) assess and delineate the capabilities and status of the NADS for

MCR&D and for CMV safety research in general; and (3) identify specific NADS-related R&D opportunities. A "menu" of potential projects will be described in terms of objectives, background (problem discussion, summary of current knowledge, and rationale for the study), research methodology (including principal tasks or phases), critical NADS features/requirements (existing or new), critical contractor capabilities/facilities, period of performance, funding requirements, potential partners, final products and applications, and product dissemination/implementation plans. FMCSA will fund experiments on the NADS commencing in fiscal year 2002. FMCSA regards the NADS as a potentially useful research tool for addressing many CMV driver safety issues. However, like any research tool, its applicability and cost-effectiveness for a research problem is being carefully assessed prior to use.

Question. Please specify dollar amounts associated with each project by year.

Answer. The NADS Utilization Study is funded at $100,000: $60,000 in fiscal year 2000 and $40,000 in fiscal year 2001.

UNSAFE CAR DRIVING PRACTICES

Question. What is the status of the DOT research project on unsafe car driving practices in the vicinity of trucks? What is the purpose of the study, and when will it be completed? What are the funding levels for fiscal year 1999 and fiscal year 2000 for that project? How much will be spent during fiscal year 2001?

Answer. The purpose of this recently completed project was to identify unsafe driving practices unique to cars traveling in the vicinity of trucks and show the relationship between these behaviors and crashes.

The study provided a list of unsafe driving acts that were recommended to be included in training materials for law enforcement officers, truck drivers, and novice operators of passenger vehicles. An Unsafe Driving Acts Guide and a draft script for a training video intended for law enforcement officers were prepared.

There were no funds expended on this project in fiscal year 1999. In fiscal year 2000, we are implementing the recommendations in the final report by developing training materials aimed at educating passenger vehicle drivers about the mechanical and operating characteristics of commercial motor vehicles (CMVs), and what to do to avoid crashes with CMVs. Funding for this effort is estimated at $100,000.

In fiscal year 2001, we will expand the previous research to focus on developing training materials to educate CMV drivers concerning how to avoid crashes with other vehicles, emphasizing defensive driving strategies and safe practices. Funding for this research is estimated at $250,000.

The products of these efforts will be incorporated into FMCSA's expanded share the road program, and will be distributed using a number of marketing strategies, including the internet.

FATIGUE R&D PROGRAM

Question. Which aspects of your current fiscal year 2000 and planned fiscal year 2001 fatigue R&D program will provide information useful in conducting rulemaking related to each of the outstanding NTSB recommendations on truck driver fatigue? How much is being allocated for these activities?

Answer. There are four outstanding NTSB recommendations to FMCSA relating to driver fatigue. These recommendations are listed below, along with information on relevant FMCSA R&D projects:

H–95–3 Examine truck driver pay compensation to determine if there is any affect on hours-of-service violations, accidents, or fatigue.

The FMCSA began a study of the impact of pay compensation practices on safety in 1998. The Phase 1 work plan and literature review are complete. The analysis of data on the possible relationship of pay compensation method to safety is underway, and is due for completion in the Spring of 2001. This project is allocated $100,000 in motor carrier R&D funds in both fiscal year 2000 and fiscal year 2001.

H–95–4 Complete rulemaking within 2 years to amend 49 CFR 392 and 395 to prohibit scheduling practices and the acceptance or scheduling of shipments which would require that the driver exceed hours-of-service regulations.

The report on the Assessment of Non-Carrier Encouraged Violations of Motor Carrier Safety Regulations has been completed and is currently under review by the FMCSA. The purpose of the study was to examine the extent to which commercial shippers and others involved in interstate commerce impose demands for the timely delivery of goods that may result in commercial motor vehicle operators' violations of Federal Motor Carrier Safety Regulations, including commercial driver hours-of-service (HOS). The report includes recommendations and policy options for addressing this issue. In addition to prior funds committed to this program from both

MCR&D and non-MCR&D sources, the project is budgeted for $200,000 in MCR&D funding in fiscal year 2001.

H–99–4 A fatigue video for motor coaches to include inverted sleep periods.

FMCSA recently completed a project identifying unique factors affecting motor coach driver fatigue, such as interactions with passengers and inability to stop for naps or personal breaks, and recommended countermeasures. The project produced a video targeted to the motorcoach industry and drivers, which includes information on circadian rhythms and inverted sleep cycles, and instruction on the need for enlightened driver scheduling and on how to minimize the effects of inverted sleep schedules. This project was allocated $149,000 in fiscal year 1999. No expenditures are planned for fiscal year 2000 and fiscal year 2001.

H–99–19 Establish within 2 years, science-based hours-of-service regulations that set limits on hours of service, provide predictable work and rest schedules, and consider circadian rhythms and human sleep and rest requirements. The revised regulations should also (a) require sufficient rest provisions to enable drivers to obtain at least 8 consecutive hours of sleep after either driving for 10 hours or being on-duty for 15 hours, and (b) eliminate 40 CFR 395.1 paragraph b, which allows drivers with sleeper berth equipment to cumulate the 8 hours of off-duty time in two separate periods.

It is widely recognized that the current hours-of-service (HOS) regulations are incompatible with current knowledge of human sleep requirements. The FMCSA has prepared a Notice of Proposed Rulemaking (NPRM) on driver HOS, whose publication is imminent, that provides, among other issues, enough daily time off for a driver to obtain sufficient sleep. The NPRM is based on the most current scientific knowledge of driver fatigue.

The split sleeper berth provision of the current HOS is one of the most problematic of HOS issues and is one for which there is little empirical data. Current Congressionally-mandated FMCSA research on sleeper berths is gathering data on the quality of sleep under various conditions, including sleeper berths in moving and parked vehicles. The next phase of this research, beginning in fiscal year 2001, will specifically address the split sleeper berth provision of the HOS.

FMCSA has allocated $400,000 in fiscal year 2000 and $410,000 in fiscal year 2001 for HOS support, including cost-benefit analysis of various options and related analysis and research on HOS-related operational issues. Funding for sleeper berth research includes $242,000 in fiscal year 2000 and $400,000 in fiscal year 2001.

Fatigue Management Technologies Pilot Test.—FMCSA has initiated, in response to Congressional direction, a pilot test of fatigue management technologies, including the actigraph (a wrist-worn sleep monitor), in-vehicle alertness monitoring, lateral lane tracking, in-vehicle "black box" performance monitoring, and fatigue-reducing vehicle steering linkage. The project will incorporate a study of individual differences in commercial motor vehicle driver susceptibility to fatigue and employ two alternative work-rest schedules. The use of alternative work-rest schedules is enabled by TEA–21 legislation granting FMCSA broader waiver/exemption authority for safety pilots. The Phase 2 data collection will begin in mid-year 2000. FMCSA believes that fatigue management technologies should be viewed primarily as aids to self and fleet management, not as instruments of surveillance. Both FMCSA Motor Carrier R&D and ITS Intelligent Vehicle Initiative funds are contributing to this project; Transport Canada is also contributing funds and participating in project management. Part of the test will be conducted in Canada and will involve international U.S./Canadian runs. This project is allocated $518,000 in motor carrier R&D funds in fiscal year 2000 and $518,000 in fiscal year 2001.

NEW PROJECT STARTS

Question. Please specify how each of the new project starts requested in the fiscal year 2001 research budget request will be used in direct support of current rulemakings or regulatory responsibilities.

Answer. In addition to numerous ongoing studies, the FMCSA Motor Carrier Research and Development program includes the new fiscal year 2001 starts listed below that are directly relevant to current or planned rulemakings or the agency's regulatory responsibilities:

Crash Risk Analysis.—The FMCSA is planning a fleet-based case control study in fiscal year 2001 comparing crash-involved and non-crash involved drivers and vehicles to identify and quantify risk factors relevant to FMCSA regulatory and other safety programs, such as driver medical conditions and training history. This will supplement the on-going major crash causation study being conducted by FMCSA in conjunction with the National Highway Traffic Safety Administration's National Automotive Sampling System.

Economic Model for Commercial Motor Vehicle (CMV) Safety Interventions.—This fiscal year 2001 Regulatory Research and Analysis Support project will develop and refine safety performance and cost models that could be used to evaluate the expected safety benefits and economic impacts of proposed regulatory initiatives, new enforcement strategies, technology advances, or incentive programs on CMV safety.

Performance-Based Physical Qualifications: Diabetes.—Research beginning in fiscal year 2001 will provide regulatory analysis support to new performance-based physical qualifications relating to diabetes.

IMPLEMENTING MOTOR CARRIER SAFETY IMPROVEMENT ACT

Question. Congress enacted significant legislation to establish a Federal Motor Carrier Safety Administration dedicated to truck and bus safety. What are the key challenges in implementing the new Act? What is the Department doing to meet these challenges?

Answer. The greatest challenges in implementing the Motor Carrier Safety Improvement Act of 1999 are in simultaneously, not sequentially, addressing the breadth of its new programmatic directives and establishing the new motor carrier safety agency. In fiscal year 2000, this must be done without an increase in personnel. We have succeeded in strengthening enforcement, conducting more compliance reviews and increasing penalties. We have quickly established the new agency and moved existing personnel into place. The Act requires major new initiatives in driver licensing and record exchange, safety reviews of new carrier entrants, enforcement of motor carrier licensing requirements, and enforcement at the Southern border. The FMCSA will substantially increase the number of safety investigators in the field and inspectors at the Southern border; expand its work with organizations such as the Commercial Vehicle Safety Alliance, the American Association of Motor Vehicle Administrators, and other safety partners; and enhance its regulatory process so stakeholders have a greater opportunity to communicate with the agency and participate in the initial stages of rule development.

Question. The Motor Carrier Safety Improvement Act of 1999 states that foreign boundaries of a commercial zone can be subject to civil penalties and will be disqualified from operating a commercial motor vehicle anywhere in the U.S. How should the Department ensure that this requirement is implemented and enforced?

Answer. FMCSA has already promulgated a final rule to incorporate the civil penalty provisions of the MCSIA that are applicable to foreign motor carriers discovered to be operating outside of the border commercial zones. The new civil penalty provisions were recently incorporated into a revised 49 CFR part 386. The final rule was published on February 16, 2000 and became effective on March 17, 2000. This rule is significant because FMCSA civil penalty assessment procedures now apply to Mexican motor carriers for commercial zone violations, whereas prior to the rule, the procedures were only applicable for safety violations.

FMCSA will conduct an outreach program to make all state enforcement partners fully aware of the prohibition on allowing Mexican- based motor carriers to operate outside of the border commercial zones. To aid in this effort, the FMCSA will issue a policy statement this Spring requiring each state to detail its registration enforcement activities in their respective Commercial Vehicle Safety Plans (CVSPs). The FMCSA will explore adding a provision related to commercial zone enforcement to the North American Standard Driver Vehicle Inspection Course.

FMCSA is also developing automated reports to identify Mexican based motor carriers that have been inspected outside the border commercial zones. The reports will be compiled from the FMCSA's Motor Carrier Management Information System. Preliminary plans call for these reports to be provided to the FMCSA State Directors in CA, AZ, NM and TX. Identified occurrences will be investigated and, if appropriate, enforcement action will be initiated (i.e., civil penalty assessment) by the FMCSA division offices.

FMCSA is developing training on collecting evidence sufficient to support this enforcement. FMCSA will work with the states in setting up agreements which will allow state enforcement official to participate in this enforcement.

In accordance with the Act, intentional and repeat violators, as well as foreign motor carriers that do not respond to civil penalty notices, will be disqualified from operating in the U.S. through suspension of their Certificates of Registration. FMCSA is developing procedures to implement this requirement.

Question. Please break out in detail how the administrative funds were used for fiscal year 1999 and fiscal year 2000.

Answer. The information follows.

Fiscal Year 1999 Administrative Funds

	Amount
$1,000,000 available:	
National Training Center (For state training courses and state Associate Staff travel)	$780,000
ASPEN–32 Technical Work Group (State travel funds for one person from 10 States to participate on the TWG. This is a two-year effort.)	60,000
Support for the Analysis and Information Web site	90,000
Guardian Newsletter	14,000
Miscellaneous MCSAP and FMCSA-related Services and Supplies (e.g., invitational travel, conference room rental, plaques, optical updates)	56,000
$1,187,500 available:	
National Training Center (For state training courses and State Associate Staff travel)	950,000
Printing of "Stopping Safely" Pocket Manuals (100,000 manuals printed and distributed during the International Safety Week.)	15,495
Miscellaneous MCSAP-related Services and Supplies (e.g., invitational travel, conference room rental, plaques)	37,780

1.25 percent of the MCSAP appropriation makes up the Administrative Takedown. Legislation requires at least 75 percent of the Administrative Takedown to be used for MCSAP State personnel training and Associate Staff Travel costs. Traditionally, we have allocated approximately 85 percent to 90 percent of the Administrative Takedown funds for these purposes. The remainder is allocated for administrative expenses.

RABA DISTRIBUTION

Question. How does FMCSA propose to use the increased funding that would be derived from the RABA distribution specified under existing law?

Answer. The FMCSA plans to use the increased funding from the RABA distribution for Commercial Drivers License (CDL) improvement grants to the states.

CRASH COLLECTION DATA BASE IMPROVEMENT PROJECT

Question. Is it correct that the fiscal year 2001 budget request includes $2.75 million for the crash collection data base improvement project and not the $5.0 million required under Section 225 of the MCSIA?

Answer. Yes, the fiscal year 2001 budget includes $2.75 million from general operating expenses for the crash data improvement project. However, the fiscal year 2001 budget proposal also includes $5.0 million from Section 225(f) Information Systems funding that FMCSA will use for this initiative for a total of $7.75 million in fiscal year 2001. The $7.75 million budgeted for the early stages of this initiative was considered an adequate funding level. Question. Does the crash collection data base improvement project include all of the required components or activities needed to implement Section 225?

Answer. Yes, the truck and bus crash data system project will include all the requirements of the subsections of Section 225 as follows: (1) Agreements will be signed with individual states to improve the collection and reporting of crash data to NHTSA and FMCSA. (2) FMCSA will sign a cooperative agreement with NHTSA to administer the program. The document will include a provision for agreements with the states for data collection and training for state and local personnel involved in the data collection. (3) NHTSA will insure that data (including driver citation data) on all truck and bus crashes are reported to the FMCSA Motor Carrier Management Information System which has links to the Commercial Drivers License Information System conviction data. FMCSA data files are and will be available to the public. (4) A report to Congress will be prepared within the three-year time frame. Question. How much will be spent on this effort during fiscal year 2000?

Answer. FMCSA will spend $4 million on the Section 225 truck and bus crash data improvement project during fiscal year 2000.

SECTION 225

Question. How do you propose to implement Section 225?

Answer. FMCSA and NHTSA have begun a cooperative effort to improve the completeness, timeliness and accuracy of commercial vehicle crash reporting. The first priority is to obtain selected data on the approximately 50,000 truck and bus crash-

es each year that are not reported by the states to FMCSA. These data are essential to identify high risk carriers and improve reporting of driver citations to the CDLIS and will be uploaded through the SAFETYNET software that the states currently use. Up to ten states are expected to participate in the first phase of this effort later this year. The second priority of the project will be to collect an expanded set of truck and bus crash data elements that will allow improved analysis of the circumstances and reasons for these crashes. Efforts to collect these additional analysis data elements will not begin until the first goal of collecting data on all truck and bus crashes has been met.

SECTION 225 OF MCSIA

Question. Is the Agency legally required to allocate the amount specified in Section 225 of MCSIA?

Answer. Yes. FMCSA has reevaluated Section 225(e) and concluded that, as authorized, $5 million of 104(a)(1)(B) is only available for the crash data improvement project. As discussed in the answer to #56, FMCSA's proposal to use only $2.75 million was based on our assessment that the overall funding of $7.75 million, was adequate for the early stages of this initiative. Without further Congressional direction, FMCSA will amend our spending plan to provide the full $5 million from 225(e) and reconsider whether the entire $5 million from 225(f) will be used for this initiative.

POSITIONS SUPPORTING MCSAP

Question. Why did FMCSA decide not to request an increase in the number of positions supporting the MCSAP? What additional workload will be placed on the staff given the substantial increase in funding and growth of the program provided under MCSIA? Are there any surveys or covert operations planned to monitor this challenge with the results being submitted to FMCSA?

Answer. FMCSA is committed to operating the headquarters office with a minimum of staff resources and rely on the field staff, located in the state Division Offices, to primarily deliver and oversee MCSAP. The increase in MCSAP funding will appropriately expand existing State programs and does not significantly impact the FMCSA overall oversight responsibility. FMCSA is confident that our Division Offices will be the front line managers of the MCSAP program and that adequate resources are programmed to provide the appropriate level of assistance and oversight to these State programs. No specific plans exist to survey this challenge. However, FMCSA's new organizational structure includes a State Programs Division and a Division that has the responsibility to perform program evaluations. MCSAP will be given full consideration for an early program evaluation.

MCSAP

Question. Please provide the empirical basis and strategic thinking that were used to determine the allocation requested on page 4.5 of the budget justification.

Answer. Of the original $165 million in MCSAP funds (before RABA), $5 million each is allocated for Information Systems and the Crash Causation Study. Of the remaining $155 million, 1.25 percent ($1,937,500) is set aside for State Training and Administration, and 10 percent ($15,500,000) is set aside for Border and High Priority Initiatives. Of the remaining $137,562,500, 5 percent ($6,878,125) is set aside for Performance Incentive Grants. The remaining $130,684,375 is reserved for Basic Motor Carrier Safety Programs.

BORDER AND HIGH PRIORITY INITIATIVES

Question. What is the rationale behind the $15.5 million request for border and high priority initiatives? Please break out by activity how those funds will be allocated?

Answer. High Priority projects to be funded for fiscal year 2001 have not yet been selected. The agency has developed a set of criteria to use for evaluating proposed projects including the following questions:

(1) How will this project serve to improve one or more of the MCSAP National Program Elements? (e.g., inspections, compliance reviews, traffic enforcement, data collection and analysis, and education and outreach)?

(2) Will the project support identification of new technologies not currently available for commercial vehicle safety enforcement or safety programs?

(3) Will the project support or promote effective state commercial motor vehicle safety program planning and implementation?

(4) What is the programmatic impact and evaluation design for the project?

(5) How will this project serve to benefit, enrich, augment, assist, or evaluate state(s) commercial motor vehicle safety programs?

A request for proposed projects will be made late this summer. Final project decisions will be made early in the new fiscal year.

Question. Are you planning to use any of the high priority funds for this purpose? If not, please explain why.

Answer. The $15.5 million allocated for border and high priority initiatives represents the total of $7.75 million for each category. It is not anticipated that high priority funds will be used for border activities, since we typically receive more requests for high priority projects than can be funded each year.

Question. Please list the high priority projects that were sponsored with fiscal year 1999 and fiscal year 2000 funds and the associated amount of funding to conduct each activity or project.

Answer. The information follows:

	AMOUNT
Fiscal Year 1999 ($4,500,000 available):	
Congressionally mandated study of the effects of MCSAP grant reductions	$175,000
Performance-based MCSAP Training for state Personnel	120,000
Commercial Vehicle Safety Partnership Program (formerly JOP)	100,000
National Judicial College	50,000
Traffic Enforcement Effectiveness Study	150,000
Effective Sanctions Study	50,000
Massachusetts Training Center	108,000
Idaho Video Project	350,000
CVSP Database	98,000
Driver Diversion/Deferral Study	225,000
Pilot Test New Driver/Brake Inspection Protocol	100,000
Minnesota Crash Investigation Course	75,000
Risk Management Methodology and Safety Programs	125,000
State Intergovernmental Personnel Exchange (2)	206,000
National Traffic Law Center	150,000
FMCSA Safety Compliance Microcomputer Support (VOLPE)	675,000
Maryland's Aggressive Driver Imaging and Enforcement project	20,000
TML Information Systems work related to Mexico	450,000
Support for the Commercial Drivers License program (AAMVA)	100,000
Grants to states (WA, MN, NJ, UT, MA) to improve inspection data quality	108,000
Grants to states (FL, WV, LA, NC, OH, MS, MD, NV) to improve accident reporting data quality	455,000
Grants to states (ME, NM) for the Driver History Initiative project	110,000
Grant to Colorado to design a program to reduce commercial vehicle accidents and fatalities	200,000
Grant to North Dakota to continue the enhancement of the ASPEN–32 third generation roadside inspection software	200,000
Grant to Kentucky for Infrared Brake screening, testing, and evaluation	100,000
Fiscal year 2000 (to date) ($4,750,000 available):	
DIAP Analysis (EPIC) $64,000 Commercial Vehicle Safety Partnership Program (formerly JOP)	156,000
Risk based Commercial Vehicle Safety Plan training	300,000
Support for the Analysis and Information (A&I) Online System	100,000
Effective Sanctions Study	75,000
Development and testing of Unique Identifiers for the CDL program	100,000
Support for the Commercial Drivers License program (AAMVA)	100,000
Evaluation of Top Ten states and improve collection of comprehensive and accurate crash data	268,000
Grants to CVISN pilot states (CT, WA, MI, OR)	2,000,000

MCSAP

Question. What has FMCSA done since last year to upgrade MCSAP sites with new technology to help focus inspections on high-risk bus and trucking companies?

Answer. FMCSA has devised a very effective means of focusing MCSAP enforcement resources on high-risk motor carriers. SafeStat is an information prioritization system which ranks motor carriers according to safety risk and generates a score

and rank order list every six months. This process focuses enforcement efforts on problem carriers.

SafeStat scores are now fed into the roadside prioritization algorithm which powers the Inspection Selection System. ISS is deployed in all states except California and Texas and is used along the roadside to prioritize selection of carriers for Driver/Vehicle Safety Inspections. ISS is decision assisting software which, when offered a U.S. DOT #, MC # or carrier name will display a recommendation of: INSPECT, PASS, or OPTIONAL along with a numeric risk score (0–100). This helps the roadside inspector decide whether to inspect a vehicle. In addition ISS provides a variety of additional data which can be consulted prior to an inspection. This type data includes carrier insurance status, operating authority status, past inspection out-of-service rate, past areas of excessive violations, fleet size, etc.

ISS, has been enhanced this year with introduction of ISS–2. The new ISS–2 is an overall enhanced system with more accurate scoring and easier identification of carriers. This summer FMCSA will introduce a new ASPEN v2 driver/vehicle inspection software which will expedite the inspection process even further.

ISS scores are also being used in the PrePass electronic screening system and are being considered for NorPass. This will provide a uniform safety screening process across the United States. California is also moving toward use of ISS, possibility as early as this summer. The FMCSA PRISM program to check carrier safety status during the registration process generates a sanctioned carrier list for priority inspection. ISS now flags these priority PRISM carriers and requests that they be given priority for inspection.

FMCSA is encouraging expenditures for inspection selection technology, with reimbursement under MCSAP. FMCSA continues to encourage states to test and adopt technologies that serve to improve roadside inspection effectiveness and efficiency.

Question. Please summarize the progress to date, remaining challenges, and outlook for future deployments during the next few years. Please assess the costs and benefits of those investments.

Answer. There are several projects underway to refine identification of high risk carriers and focus enforcement resources toward those companies. One ongoing project allows states to assign a U.S. DOT # to intrastate carriers. Once carriers are identified with a U.S. DOT #, all the various FMCSA data collection and analysis systems will function. ISS scores, for example, can be generated for this large group of carriers. This is particularly important because a significant number of these carriers actually move between intra and interstate commerce. There are significant additional FMCSA system costs ($0.5 million/yr) to process this data. These costs are not currently covered in the FMCSA IT budget and that has slowed these efforts. The benefits are substantial in that they allow us to focus our resources to identify high risk intrastate carriers. Given that intrastate carriers are responsible for 20 percent of our fatalities, it is important to focus resources on them if we are to meet our 50 percent fatality reduction goal and provide this substantial benefit to the program.

A decision is being evaluated to increase the SafeStat score calculation rate from every 6-months to every three months. This will enhance data accuracy and is highly favored by the motor carrier industry because it allows their safety improvements to be more quickly reflected in the prioritization systems. Cost is a major issue here since SafeStat currently still runs on a mainframe system. FMCSA is about 2-years from fully moving these systems to an enhanced Oracle server system.

A new initiative at FMCSA is to develop a sophisticated third generation unified query system called Query Central (QC) which will allow combining six different critical safety information queries (ISS, Past Inspections, Commercial Driver License Status, PRISM, Licensing and Insurance) into a single, simple query. Targeted for early deployment on the Mexican-American border, Query Central will greatly speed delivery of decision level data to the roadside inspection sites. This system will be based on the latest web-based technology and employ considerable advanced analysis to deliver maximum information with minimum effort at the inspector level. While initial development of QC has been funded and will be done by the same group as ISS, the need remains to build a wireless infrastructure to allow roadside and carrier office queries to be entered into the web-based system.

FMCSA has a small wireless information delivery project underway, but has no funding for a full development effort or grants to states to allow procurement of a wireless infrastructure. Estimates for state deployment are $7–$8 million, but before that, additional development funding of $2 million is needed. States are very interested in early deployment. FMCSA also has a small project for adding Voice Recognition technology to this effort.

Another area of active development is enhancement of data quality to further improve the prioritization systems. A new project is underway to evaluate how most effectively to use commercial driver citation data in the SafeStat system. There are also several projects underway to improve collection of commercial motor vehicle crash information.

An additional benefit that identification of out-of-service violators has increased during the operation of the SAFER Data Mailbox (SDM). While this increase is influenced by a number of factors and is not completely attributable to the SDM, anecdotal information from individual users indicates that inspection queries to the SDM does help to identify violators. Individual enforcement officers have identified multiple offenders in a single shift using the SDM, including offenders with out-of-service violations and false log books that have been inspected earlier on the same trip.

DEPLOY CVISN

Question. How are you using MCSAP funds to help the states deploy CVISN?

Answer. In fiscal year 2000, we are using $2 million of MCSAP high priority funds to support the CVISN Level 1 deployment efforts in four pilot states. The use of MCSAP high priority funds is critical for helping the Department achieve the Congressional goal of completing CVISN deployment in a majority of states by September 30, 2003. By the end of fiscal year 2000, based on a combination of using MCSAP high priority and ITS program funds, eight states (two CVISN prototype states and six pilot states) will be fully funded to complete Level 1 deployment.

Both MCSAP and CVISN are focused on improving safety and reducing the number of crashes involving commercial motor vehicles. CVISN supports MCSAP by providing more timely and accurate safety and related credentialing information, enabling state enforcement officials to use their resources more effectively to concentrate on high-risk and previously uninspected carriers, vehicles, and drivers.

BORDER PROJECTS

Question. Please list the border projects that were awarded during fiscal year 1999 and 2000, the recipients, and the purpose and nature of each project or activity along with associated funding amounts.

Answer. The Transportation Equity Act for the 21st Century (TEA–21) authorizes the Secretary to dedicate up to 5 percent of the Motor Carrier Safety Assistance Program (MCSAP) funds for border commercial motor vehicle safety program and enforcement activities and projects. Congress has appropriated the full 5 percent for border assistance in fiscal year 1999 ($4,500,000) and fiscal year 2000 ($4,750,000). These funds have been made available to both the northern and southern border states. However, in recognition of the special problems faced by the southern border states in addressing the current safety concerns and in preparing for full implementation of the North American Free Trade Agreement (NAFTA), proposals received from California, Arizona, New Mexico, and Texas have received priority consideration. Of the amount made available in fiscal year 2000, we are reserving $575,000 to fund two projects which will benefit all border states: (1) develop software to provide better network access to border inspectors ($500,000) and (2) conduct a study to determine the extent of the safety problems associated with the cross-border commercial van operations commonly referred to as camionetas ($75,000). Sec. 212 of the Act of 1999 requires that we complete a rulemaking to determine which small passenger vans should be covered by FMCSRs and, at a minimum, apply the safety regulations to camionetas. Following is a summary of the amount awarded to each state that applied for the funds:

State	Fiscal years—	
	1999	2000
California	$1,505,800	$1,418,200
Arizona	530,900	370,800
New Mexico	551,000	553,800
Texas	1,826,300	1,832,200
Washington	60,000	.....
Vermont	26,000	.....

The majority of the funds were used for personnel services to step up state enforcement activities at the border. Other specific projects funded include purchasing vehicles, laptop computers and other equipment needed by inspectors, traffic en-

forcement activities, and development of software to integrate Mexican motor carriers into the existing automated pre-clearance systems. A portion of the funds allocated to California in fiscal year 2000 will also be used to conduct inspections targeting Mexico-domiciled commercial motor vehicles traveling beyond the scope of their operating authority.

INSPECTION PROGRAM AT SOUTHERN BORDERS

Question. How have you addressed each of the findings and recommendations specified in the IG's report number TR–1999–034 which pertains to the effectiveness of the inspection program at the southern borders?

Answer. We have responded to all the OIG's recommendations as follows. Many of these activities were under way prior to the OIG's report:

Recommendation 1.—Supplement border states with requisite federal inspectors at border crossings, and provide inspection facilities including communication lines and computers.

Response 1.—We have hired 40 federal inspectors to complement the 116 state inspectors working in the Southwest border area and plan to hire an additional 20 inspectors in fiscal year 2001. In addition, we purchased modular office space, including telephone and electrical connections at six Texas locations. We continue to work with Customs and INS to address space limitations within the ports of entry.

Recommendation 2.—Establish partnerships with border states to ensure requisite inspection presence is maintained at the border and throughout the states.

Response 2.—We continue to provide the states special funding above basic Motor Carrier Safety Assistance Program (MCSAP) grants to conduct additional compliance and enforcement activities and to encourage the states to make certain that inspection facilities are given priority consideration in the state's application for grants made available under the TEA–21 National Corridor Planning and Development Program (Section 1118), the Coordinated Border Infrastructure Program (Section 1119) and other Federal-Aid programs.

Recommendation 3.—Expedite procedural changes for Mexican carriers to obtain authority to operate in U.S. and ensure carriers provide more thorough information including the procedures they will use to ensure compliance with U.S. safety regulations.

Response 3.—We have drafted three related Notices of Proposed Rulemaking (NPRMS) that a include totally revised application procedures for Mexican motor carriers. The proposed three-step process involves a new application form, a safety screen, and compliance and enforcement procedures. The draft rules are currently under review within DOT.

Recommendation 4.—Develop DOT identification numbers that will distinguish between commercial zone and long-haul Mexican trucks to serve as a control at the border for safety inspections and to expedite registration and insurance verification as border entry points are equipped with electronic scanning devices.

Response 4.—One of the draft rules currently under review, contains a method for easy identification of the type of operating authority that will be granted to a Mexican carrier. We are also testing the use of technologies for the electronic identification of carriers at selected ports of entry. The goal is to be able to make available to safety inspectors at the border information related to a carrier's registration, insurance, and safety record.

Recommendation 5.—Establish a NAFTA program director to address a consistent enforcement program from state to state, to identify needed resources and infrastructure improvements, and to quickly realign resources as needed.

Response 5.—The FMCSA has established a North America Borders Safety Programs Division with a designated Chief to advance our safety interests along the border.

Recommendation 6 (addressed to the Secretary).—Establish a federal interagency group to coordinate border issues with the many federal and state agencies with jurisdiction at the border.

Response 6.—The Department regularly participates in five interagency working groups that also include Canadian and/or Mexican government officials. These groups are charged with coordinating and monitoring a wide range of issues related to cross-border operations, facilitation, and infrastructure planning. DOT chairs two of these five groups: the Joint Working Committee on Transportation Planning (JWC) and the Transportation Consultative Group (TCG). In response to the inspector general's recommendation, the Office of the Secretary, which heads the TCG, will strengthen its efforts to solicit the views of U.S. federal and state agencies at U.S. delegation meetings to ensure that U.S. interests are properly and comprehensively represented at international meetings.

ALLOCATION OF INCENTIVE FUNDS

Question. What progress have you made in developing regulations to determine the allocation of incentive funds under the MCSAP, and when are those regulations likely to be issued in final form?

Answer. The Motor Carrier Safety Assistance Program Final Rule became effective April 20, 2000. Contained therein are regulations governing the allocation of MCSAP funds to the States, including Incentive Funds. The new distribution formulas will be used to allocate Basic Program Funds and Incentive Funds for fiscal year 2001.

RESEARCH BUDGET REQUEST

Question. What aspects of your research budget request pertaining to MCSAP could legally be supported with MCSAP funding? Please break out and specify amounts and projects.

Answer. The Motor Carrier Safety Assistance Program (MCSAP) High Priority funds can be used to support Motor Carrier Research & Development (MC R&D) projects if the projects increase either the effectiveness or efficiency of state motor carrier safety activities. The FMCSA MCR&D program contains a Compliance and Enforcement focus area. The following projects in this focus area, which total $1,625,000 in the fiscal year 2001 MCR&D budget request, address commercial motor vehicle enforcement procedures, data systems, and technologies:

Development, Evaluation, and Application of Brake Testing Devices	$150,000
Development of Voice Recognition Technologies	200,000
Development and Testing of Unique Identifiers for the CDL Program	200,000
Data Quality Enhancement Study	100,000
Evaluation of FMCSA Compliance & Enforcement Information Process	250,000
Evaluation and Enhancement of CMV Driver Data Exchange	300,000
Development of SafeStat Algorithm for Motor Coaches	75,000
Technology Deployment for Improved Hours-of-Service Compliance	350,000

Even though the above research projects are eligible for MCSAP high priority funding, many states also seek high priority funds for state-wide efforts. Typically, the requests exceed the monies available and only priority projects receive funding (See Q65 for High Priority Guidelines). Therefore, FMCSA believes that both MCSAP High Priority and MCR&D funding are needed to support the many improvements needed in Federal and state CMV enforcement programs.

OPENING OF SOUTHERN BORDER

Question. Why is FMCSA requesting funds to hire additional staff to inspect vehicles at the border when it appears that the opening of the southern border does not appear to be imminent?

Answer. Additional Federal staff at the border is needed to address the existing safety concerns as well as prepare for the full implementation of the NAFTA provisions. According to the NAFTA truck access provisions, the U.S. and Mexico were to have allowed access to each other's border states for the delivery and backhaul of cargo by December 1995. Also, by January 2000, all restrictions on cross-border trucking were to have been lifted providing access to and from any point in each other's country. Even though these cross-border provisions have not been implemented because of safety concerns about Mexican operations, Mexican trucks have been and continue to be allowed to enter the U.S. and operate in limited commercial zones along the border. These zones are generally within a radius of two to twenty miles from the nearest U.S. border city. The NAFTA placed a new focus on the safety concerns that exist on the Southern border and the need to increase compliance and enforcement activities in advance of NAFTA.

Our efforts in dealing with these safety concerns include both short term and long term strategies: In the short term we have hired 40 Federal inspectors to augment the existing state enforcement presence at the border and plan to hire an additional 20 inspectors in 2001. These Federal inspectors are needed until states are able to assume all enforcement responsibilities. In the long term, we believe that the most effective means to ensure safe cross-border operations is through continued strengthening of the long-standing federal-state partnership created by the Motor Carrier Safety Assistance Program (MCSAP). As the states build and staff inspection facilities along the border within the next five to seven years, the Federal presence at the border will be decreased and inspectors will be reassigned to other responsibilities. As with all performance results approaches, specific periodic evaluations will be designed to assist in this decision.

HIGHEST INCIDENT OF MOTOR CARRIER ACCIDENTS

Question. Please provide a list of the ten highway facilities with the highest incident of motor carrier accidents with loss of life over the past five years.

Answer. The following table lists the type of highway facility on which fatal crashes involving at least one large truck occurred in the last five-year period for which data are available. Almost one-fourth (23 percent) of all fatal truck crashes took place on rural principal arterial highways other than interstates. Over half of the fatal crashes took place on rural roads.

FATAL CRASHES INVOLVING LARGE TRUCKS, 1994 TO 1998

Roadway function class	Fatal crashes	
	Total	Percent
Rural—Other Principle Arterial	5,066	23
Rural—Minor Arterial	2,932	13
Rural—Interstate	2,794	13
Urban—Other Principle Arterial	2,489	11
Rural—Major Collector	2,383	11
Urban—Interstate	2,068	9
Urban—Minor Arterial	1,209	5
Rural—Local Road	842	4
Urban—Local Road	690	3
Urban—Freeway/Expressway	785	4
Rural—Minor Collector	427	2
Urban—Collector	278	2
Unknown	192	1
Total	22,155	100

Source: Fatality Analysis Reporting System (FARS) 1994–1998.

INFORMATION SYSTEMS AND ANALYSIS SECTION

Question. How do you intend on using the $5 million of additional funds provided for information systems and analysis that are authorized in MCSIA?

Answer. The $5 million will be used for the Section 225 truck and bus crash data improvement project. In this project, FMCSA will work with NHTSA and the states to improve the timeliness, completeness and accuracy of commercial vehicle crash data.

COMMERCIAL MOTOR VEHICLE CRASH CAUSATION

Question. Will FMCSA allocate $5 million during fiscal year 2001 to fund a study on commercial motor vehicle crash causation? How will these funds be used? Please detail the scope and nature of cooperative arrangements with NHTSA to improve data analysis and to conduct crash causation studies.

Answer. The budget for the Large Truck Crash Causation Study (CCS) for fiscal year 2000 and 2001 follows:

Activity	Fiscal years—	
	2000	2001
Transportation Research Board advisory committee	$188,000	$194,000
Accident Expert	100,000	100,000
State MCSAP Agencies	500,000	900,000
MCSAP post crash vehicle truck inspection training	40,000	100,000
NHTSA—Training	17,000	2,000
NHTSA—Data form and coding manual development	122,000	40,000
NHTSA—Data collection	1,140,000	2,989,000
NHTSA—Software design and maintenance	893,000	675,000
TOTAL	3,000,000	5,000,000

FMCSA and NHTSA have designed a crash causation study within the framework of NHTSA's National Automotive Sampling System. Beginning with the pilot study in four NASS sites this summer and continuing in all 24 sites in 2001, crash causation data will be collected on approximately 1,000 serious truck crashes. MCSAP inspectors will conduct post crash Level 1 inspections on all the trucks selected for the study. Both the NASS researchers and the MCSAP inspectors will receive special training to be able to collect the information necessary to determine the primary and secondary causes of the sampled crashes. Data will be entered in the field electronically and will be uploaded to a national database. A Transportation Research Board advisory committee will meet twice a year for three years to evaluate the study design, data collection protocol and preliminary results. FMCSA has hired a consultant who formally was in charge of NHTSA's Special Crash Investigation division and is an expert on crash reconstruction and analysis to review and evaluate every detail of the project.

INFORMATION SYSTEMS AND ANALYSIS SECTION

Question. Please break out how the fiscal year 1999, fiscal year 2000, and fiscal year 2001 funds for information systems and analysis have been or will be allocated. How much of these funds was or will be used for FMCSA-generated studies and information systems and how much was or will be allocated directly to the states?

Answer. The Information Systems budget is shown in the table below:

	Fiscal years—		
	1999	2000	2001
Analysis	$800,000	$1,100,000	$2,300,000
Information Systems	3,200,000	3,200,000	3,700,000
Driver	1,000,000	825,000	1,000,000
PRISM	5,000,000	4,875,000	5,000,000
Total	10,000,000	10,000,000	12,000,000

The majority of the Driver and PRISM funds go directly to the states for driver safety initiatives or to participate in the PRISM program. In general, the information systems funds do not go directly to the states, but support data systems that are used by the states to retrieve and upload safety data. In fiscal year 2000, however, one state did receive a $500,000 grant for information systems work. The analysis funds support FMCSA-generated studies and do not go directly to the states.

PERSONNEL ISSUES

Question. Please prioritize the positions requested.

Answer. New Administration positions. FMCSA proposal to add 49 positions to "staff out" the management and administration and of this new Administration will provide a staff, that by comparison, is less than half the staffing level at similar sized DOT operating administrations. These positions are considered the minimum of additional personnel needed to effectively operate as an independent administration in fiscal year 2001. Prioritizing these necessary positions would require an evaluation of compromises to the overall delivery of FMCSA programs. The 4* "program positions" of the 49 have less priority than those needed to provide basic management and administration of the FMCSA. Additional Program Positions (prioritized below).

	Existing	Additional positions
New administrative positions:		
Agency Management	1	9
Regulatory Ombudsman	.....	1
Executive Secretariat	.....	4
Civil Rights Office	.....	3
Public and Consumer Affairs Office	2	3
Chief Counsel Office [1]	2	26
Fiscal & Budget Staff	2	5
Personnel Staff	1	6

	Existing	Additional positions
Management Services Staff [2]	4	6
Passenger Carrier & International Program	8	4*
Additional Program Staff Priorities:		
Safety Investigators	220	42
Border Inspectors	40	20
Crash Data Analyst	.....	1
UCR Specialist	.....	1
Technology Specialists	7	4
Regulatory Staff	7	1

[1] Note: 17.6 Motor Carrier Legal Positions to be transferred from the FHWA.
[2] Note: Includes 3 existing FOIA positions.

Question. Please provide additional justification for each of the positions requested. Please discuss each request in terms of workload, agency performance goals, impacts on not funding, ability to use existing field staff or attorneys, and number of personnel already conducting similar functions.

Answer.

New Administration positions.—The additional staff proposed to manage and administer the FMCSA is considered the minimum to deliver the critical motor carrier safety programs that have been legislatively established. The eight administrative positions that are now assigned these duties are presently complemented by the full administrative support of the FHWA. Without FHWA support in fiscal year 2001, the first 46 positions listed above are necessary to establish an FMCSA management structure and operate an Office of Administration for fiduciary responsibility, management services and human resources. It is planned that with the limited administrative staff requested, FMCSA will have to procure the majority of support services needed to operate. For example, FMCSA will procure from another DOT operating administration services for a financial management system. The impact of not funding these critical management and administrative positions includes the possibility that the operation of FMCSA will have adverse effects on program objectives. The remaining 6 positions are program positions that address Congressional priorities identified in MCSIA.

Additional Program Positions.—FMCSA has prioritized the enforcement and compliance of federal motor carrier safety regulations through increased compliance reviews of motor carriers. To advance this initiative 42 additional safety investigator are proposed to be hired and assigned to locations that will be selected based on carrier performance and existing staffing levels. In addition, 20 new border inspectors are proposed to increase our ability to better inspect the border crossings. Adding these 62 field positions is considered the highest FMCSA staffing priority. The remaining 7 positions support selected program initiatives that will deliver legislated initiatives and high FMCSA priorities for meeting the goal to reduce motor carrier related fatalities by 50 percent in ten years. The four technology positions are particularly important since technological advances in motor carrier safety are necessary to reach the 50 percent fatality goal.

FMCSA's highest priority is the effective and efficient operation of our "front line" field organization that delivers the program at the state level. Consideration is not being given to utilizing field staff to complement headquarters administrative or program operations. In addition, all motor carrier associated field legal support is obtained from the FHWA. On October 1st, FHWA will transfer 17.6 legal positions to the FMCSA comprised of FHWA staff that presently support motor carrier initiatives and vacant positions.

All of the 118 positions that are proposed to be added to FMCSA are identified and discussed in the attached report, "Justification for Additional Federal Motor Carrier Safety Administration Personnel." The comparison of existing and proposed positions is presented in the table provided in response to the previous question.

QUESTIONS SUBMITTED TO THE FEDERAL RAILROAD ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

LEGISLATIVE LANGUAGE FOR TRANSFER OF MAGLEV FUNDS

Question. Has legislative language been proposed in the fiscal year 2001 Federal Highway Administration budget to authorize this transfer of maglev funds to FRA for non-maglev program purposes? Would such legislative authority be necessary to enable this transfer?

Answer. The FHWA budget contains an obligation ceiling ($25,000,000) for the maglev program and specific authority for FRA administrative expenses and technical assistance ($3,500,000 of the $25,000,000). Since Section 1218 of TEA–21, which authorized the maglev program, contains no specific authorization for highway trust funds to be spent for non-maglev purposes, specific legislative authority is required to enable the contemplated transfer of $1,500,000 to non-maglev programs. FRA would be happy to assist the Committee in drafting such legislative authority, if requested.

IMPACT OF NOT RECEIVING $1.5M IN MAGLEV FUNDING

Question. Assuming that this proposed transfer is not enacted by the appropriation process, what budgeted programs would you cut in Safety and Operations to make up the $1,500,000 shortfall?

Answer. If the $1.5 million was not provided to the Safety & Operations account, FRA would be forced to reduce safety staffing and travel, other administrative costs, the Operation Lifesaver grant and the ATIP contract. These reductions would have a detrimental impact on our mission.

Therefore, it is critical that the $1.5 million be transferred to FRA from the maglev program.

ATIP FISCAL YEAR 1998–2001 FUNDING

Question. In February 1999, FRA awarded a $3,700,000 grant to ENSCO, Inc. of Springfield, Virginia for the acquisition of a new track geometry measurement vehicle to replace the T–10 track geometry measurement car. Please provide a detailed breakout of the program costs for ATIP in the fiscal years 1998, 1999, and budgeted for 2000 and 2001. How much of the program costs in each of these years have gone toward the procurement of the new track geometry vehicle? What is the status of this procurement. Will the T–10 track geometry measurement car be retired, or remain in use?

Answer. The program costs for fiscal year 1998 through fiscal year 2001 follow:

	Fiscal year			
	1998 actual	1999 actual	2000 projected	2001 requested
Operating Costs	$1,325,000	$2,061,000	$2,925,000	$3,169,000
Equipment	350,000	2,761,000	589,000	.....
Total	1,675,000	4,822,000	3,514,000	3,169,000

The acquisition of a new track geometry car was awarded to the lowest bidder. The purchase price, $3.7 million, was $700 thousand more than FRA's original estimate. To accommodate the shortfall, FRA reduced the number of miles inspected in fiscal year 1999 and fiscal year 2000 for savings of $111 thousand, and $589 thousand, respectively. The fiscal year 2001 request reflects the total funds needed to operate the new track geometry inspection vehicle over 25,000 miles of track per year, the bare minimum needed for an effective track inspection program.

Currently, ENSCO's subcontractor is fabricating the host vehicle. Completion is scheduled for June 2000. Following the construction of the host vehicle, ENSCO will install the computer processing equipment. FRA anticipates the delivery of the new track geometry vehicle in the Fall of 2000.

The continued operation of FRA's current T–10 track geometry car in tandem with the new car is anticipated for a brief period, to facilitate calibration of the new system. To date, no decision has been made on the final disposition of the current T–10 vehicle.

LIGHT DENSITY LINE RAIL STUDY

Question. Please update the Committee on the status of the small railroad investment needs and financial options study that was funded at a level of $150,000 in the fiscal year 2000 conference report. Will FRA work with any other entities, such as the American Short Line and Regional Railroad Association, in conducting this study? When will the study be completed?

Answer. FRA has met with the American Short Line and Regional Railroad Association to define the approach of the study, which is costing $150,000. The study will be completed by the North Dakota State University, the entity that manages the National Short Line Railroad Database for the American Short Line and Regional Railroad Association. FRA anticipates that the study will be completed within a year.

STUDY ON 286,000-POUND RAIL CARS

Question. Is FRA currently conducting a study regarding track and bridge requirements for handling 286,000-pound rail cars, as the agency was encouraged to do in the fiscal 2000 House report? Will the findings of the 286,000-pound railcar study be incorporated into the investment needs study?

Answer. The American Short Line and Regional Railroad Association (ASLRRA) has recently submitted its grant application to FRA, requesting funds to carry out the study of 286,000-pound cars on light density rail lines. FRA is processing the application now and expects to award the grant shortly. The ASLRRA has already selected a contractor and expects the study to be completed in mid-summer 2000.

The findings of this study of track and bridge requirements for 286,000-pound cars will be available in time for inclusion into the investment needs study.

REQUEST FOR 10 ADDITIONAL POSITIONS

Question. FRA is requesting 10 new railroad safety field positions in fiscal year 2001 (5 FTEs), with an associated dollar increase of $564,000. Is the expected time in service in fiscal year 2001 an average of 6 months? Please detail the anticipated deployment of these ten positions—what will the job titles, GS ranking, and field office assignment be for each? What is the average personnel cost per FTE?

Answer. FRA is requesting a total of $564 thousand for 10 positions. Funding provides salaries and expenses for 6 months (5 FTEs). Of the $564 thousand requested, $391 thousand is for PC&B and $173 thousand is for expenses such as travel, IT and office equipment, training, rent, and other support costs. Depending on the grade and work performed, costs for each position range from $42—$77 thousand.

Exact titles have not been established for each position nor the field assignment. Grades range from GS–11–14. The ten positions will enable FRA to address several critical safety priorities, including grade crossing, rulemaking, safety enforcement, railroad security, and other RSAC/SACP related assignments.

PRIORITY OF ADDITIONAL POSITIONS REQUESTED

Question. Please prioritize the new positions requested, indicating which are most important in view of the most pressing demands on FRA.

Answer. All of the positions are important and critical in meeting the demands placed upon FRA. FRA is committed to meeting each of its safety measures. FRA's ability to achieve these goals can be attained only through a commitment to a broad array of safety initiatives. The 10 additional positions will enable FRA to keep its safety commitments.

FUNDING FOR FATIGUE COUNTERMEASURES

Question. Is FRA currently funding any partnership work on fatigue countermeasures with the North American Rail Alertness Partnership or the National Sleep Foundation, or with other organizations such as rail labor unions? If so, please detail these contracts.

Answer. Under Technical Support for Human Factor Issues, FRA's Office of Research and Development contracts the Volpe National Transportation Systems Center (Volpe) to study a variety of topics, of which fatigue may be a component. Examples of current Volpe activities where fatigue may be a study component include 1-person crew operation of Amtrak locomotives, locomotive cab ergonomics, and rail yard and terminal safety.

FRA founded and sponsors meetings of the North American Rail Alertness Partnership (NARAP) and agency representatives attend meetings with the National Sleep Foundation, where strategies for fatigue countermeasures are being discussed. The railroad industry has begun to implement innovative measures to combat the

threat of fatigue based on the findings and recommendations of NARAP. Many of these efforts are still in the embryonic stages. In March 1999, an agreement between the carriers, the United Transportation Union, and the Brotherhood of Locomotive Engineers specifically deals with addressing fatigue.

The $300 thousand requested in fiscal year 2001 in the Safety and Operations account, will allow FRA to develop implementation strategies and facilitate partnership efforts to further the adoption of fatigue mitigation programs throughout the railroad industry. The funding also will be used to help FRA obtain more accurate and complete data regarding the role of fatigue in rail related accidents. Currently, protocols for obtaining such documentation are unreliable. Delays in addressing fatigue-related accident analysis will result in the unnecessary loss of lives.

NHTSA'S WORK ON FATIGUE COUNTERMEASURES

Question. Is FRA aware of or involved with any of the National Highway Traffic Safety Administration's ongoing work on fatigue countermeasures? Please describe the level of involvement, if any, in these efforts.

Answer. The Office of Safety has recently established informal partnerships with the National Highway Traffic Safety Administration (NHTSA), at the regional level, to discuss the exchange of information regarding fatigue related issues. FRA is interested in using the results from NHTSA's drowsy driver initiative to address the fatigue concerns of the Brotherhood of Maintenance-of-Way Employees and the Brotherhood of Railroad Signalmen. Excessive travel requirements-and possible fatigue ramifications-constitute a significant safety concern for the members of these two rail labor organizations.

Under Secretary Slater's ONE DOT Initiative, the entire Department coordinates its activities on fatigue and other human factors issues.

STAFFING FOR FATIGUE PROGRAM

Question. What level of commitment does FRA envision being associated with this $300,000 program request?

Answer. The Office of Safety has allocated 1.5 FTEs to fatigue-related issues which includes the position, Transportation Fatigue Program Coordinator. FRA will use the initial funding for a systematic approach to assessing how fatigue affects the rail industry and the lives of its employees and customers. With continued annual support of this effort, cost effective approaches to fatigue issues can be developed and implemented.

In addition, the funding will provide the stimulus for expanding the Administration's fatigue awareness initiatives within the railroad industry. Initiatives associated with education and training (including the development of innovative work/rest pilot projects) could also be significantly accelerated. This will result in a reduction in injuries and fatalities. Other initiatives that could be implemented or refined include: (a) initiating near-miss pilot programs, (b) sponsoring industry-wide conferences or executive roundtable discussions to expedite solutions, (c) identifying and expediting fatigue countermeasures for non-operating employees, and (d) contracting the services of recognized experts in fatigue countermeasures to help expand outreach/partnerships to rail and non-rail entities pertaining to fatigue countermeasures.

The National Transportation Safety Board estimates that human factor-caused accidents (including those containing a fatigue component) constitute nearly 35 percent of all train accidents. An effective fatigue mitigation program could reduce human factor-caused train accidents by nearly a third.

The fundamental mandate of the Office of Safety is to undertake whatever initiatives or measures are available to ensure the safest environment within the railroad industry for employees, customers (shippers/public), and all other stakeholders. The recognition and resolution of fatigue problems is an integral issue in current and future FRA initiatives. Under DOT's Safety Strategic Goal, fatigue issues are a Flagship Initiative.

OPERATION LIFESAVER AND OUTREACH PROGRAM

Question. In fiscal year 2000, the conferees increased funding for Operation Lifesaver from $600,000 to $950,000, and designated the $350,000 increase as seed money for a national public service campaign that has the financial and technical support of the railroad industry, FRA, and the law enforcement community. Have those contract funds been released to Operation Lifesaver? What is the current status of the national public service campaign effort?

Answer. Operation Lifesaver, Incorporated (OLI) operates on a calendar year budget cycle. Upon completion of a required annual financial audit, OLI applies for

the annual FRA grant. For fiscal year 2000, FRA received OLI's grant request on February 28, 2000. FRA anticipates the first release of funds under the grant in April 2000.

The national public service campaign effort is well underway. FRA, OLI, and the Association of American Railroads have met several times to discuss basic concepts and have agreed upon key campaign issues. Law enforcement interests are represented by the OLI Program Development Council's Law Enforcement Committee whose members represent various state and railroad police and a representative from the International Association of Chiefs of Police. Requests for proposals were received in January 2000, and a contractor and an advertising agency have been selected. Design of the public service announcements currently are underway. Upon completion, they will be tested on focus groups in at least four major cities across the nation before being implemented nationwide.

REQUEST FOR GRADE CROSSING OUTREACH PROGRAM

Question. In the fiscal year 2001 budget request, FRA is requesting $500,000 for a highway-rail grade crossing safety outreach program. Is this request a follow-on to the national public service campaign, with the funds provided to Operation Lifesaver through the normal contract process? Or is this a new, unique FRA outreach program, conducted separately from Operation Lifesaver's public awareness and education efforts? If it would be a separate new program, why is this necessary? What unique and value-added contributions can FRA make that could not be accomplished by Operation Lifesaver?

Answer. The funds requested in fiscal year 2001 will be used to develop a new coordinated and branded public outreach program to promote crossing safety. This effort will build on the national public service campaign conducted by Operation Lifesaver, Incorporated (OLI). FRA's campaign will be a comprehensive, long term program, developed in coordination with OLI, the National Highway Traffic Safety Administration (NHTSA), the Federal Highway Administration, Office of Motor Carrier Safety, the Federal Transit Administration, the Association of American Railroads, rail labor and others.

The outreach program will explore the use of multiple messages targeted to specific audiences. It will utilize pilot programs and assessment tools to test the effectiveness of proposed slogans and campaigns before they are implemented on a widespread basis. Some of the funding will be used to broaden FRA's outreach to the law enforcement and judicial communities, and to develop materials to support these outreach efforts. Efforts also will be undertaken to develop outreach strategies that address initiatives that have not historically fallen within the purview of OLI. These include outreach to communities that will be impacted by the Federal Train Horn Rule, and development of educational materials concerning grade crossing safety on rail lines that are converted to shared light rail/freight rail operations. In addition, different partnerships will be developed that need unique outreach support. These include non-traditional partnerships with Metropolitan Planning Organizations (MPO's), national insurance institutes, car manufacturers, and truck manufacturers.

FRA VS OLI OUTREACH CAMPAIGN

Question. How is it considered cost-effective for FRA to seek funds to hire another firm to develop and carry out a "branded" PSA campaign containing the same elements as the OLI/FRA/AAR campaign that was approved and funded in fiscal year 2000? Doesn't this duplicate FRA's ongoing support to Operation Lifesaver?

Answer. The "branding" effort that FRA proposes does not contain the same elements as the OLI/AAR campaign approved and funded in fiscal year 2000. It would build on that existing work and involve close cooperation with OLI, the railroad industry, law enforcement, the judicial system and other non-traditional partners. The process will involve identification of a "brand" name and methods of assuring that the name recognition for grade crossing safety and trespass prevention messages resonate with the public. It would also identify and/or modify internal and external management and communication processes that facilitate delivery of a consistent message. In that sense, it focuses on the development of effective management and communication strategies that most effectively deliver that message.

OLI/AAR development and promotion of the current Public Service Announcement (PSA) campaign will be a major component of FRA's initiative. However, the proposed initiative goes beyond delivery of a single message. It includes the development of an effective message delivery system and a set of analytical tools to determine the continued effectiveness of the message and the means for assuring the redevelopment of new messages that consistently promote the "brand name" associ-

ated with grade crossing safety and trespass prevention. The proposal will supplement, not duplicate PSA crossing safety work underway by OLI/AAR. It will be a comprehensive, long term program, developed in coordination with OLI, the National Highway Traffic Safety Administration (NHTSA), the Federal Highway Administration, Office of Motor Carrier Safety, the Federal Transit Administration, the Association of American Railroads, rail labor, and others.

The outreach program will explore the use of multiple messages targeted to specific audiences. FRA is already working with OLI and the rail industry to prepare a demographic study of trespassers. FRA also will ask NHTSA to update their 1994 demographic study of crossing-related fatalities. The outreach program will utilize pilot programs and assessment tools to test the effectiveness of proposed slogans and campaigns before they are implemented on a widespread basis. Some of the funding will be used to broaden FRA's outreach to the law enforcement and judicial communities, and to develop materials to support these outreach efforts. Efforts will be undertaken to develop outreach strategies that address initiatives that have not historically fallen within the purview of OLI. These include outreach to communities that will be impacted by the Federal Train Horn Rule, and development of educational materials concerning grade crossing safety on rail lines that are converted to shared light rail/freight rail operations. In addition, different partnerships will be developed that need unique outreach support. These include non-traditional partnerships with Metropolitan Planning Organizations, national insurance institutes, car manufacturers, and truck manufacturers.

INCREASE IN TRAVEL COSTS

Question. In the object classification table for Safety and Operations, the request for "travel and transportation of persons" increased $630,000 above the enacted base of $7,126,000. Is the $500,000 increases in safety travel part of this increase? What type of travel is the remaining $130,000 in the request associated with?

Answer. The $630 thousand increase reflects the following:

Safety travel	$500,000
Ten new positions travel	27,000
Inflation and PCS-related increases	103,000
Total	630,000

IMPACT OF NO INCREASE IN FRA'S TRAVEL BUDGET

Question. What steps could be taken to reduce travel expenses if the $500,000 requested additional travel funds are not provided?

Answer. With little discretionary spending authority, FRA will need to reduce planned community outreach and railroad partnership activities if the requested travel funds are not provided. This will occur at a time when FRA's safety responsibilities continue to grow, in large part due to fulfillment of statutory mandates to conduct rulemakings and special studies.

FRA's safety programs require a balanced approach of inspections coupled with partnerships, which enlist the cooperation of rail labor and management to identify and correct safety concerns in the railroad industry.

As a result of increased public, congressional, and Administration expectations for the railroad safety program, FRA finds itself in a position of extreme vulnerability. Without sufficient travel funds FRA may find it necessary to curtail some SACP activities and random inspection activity. A travel fund shortfall would constrain FRA from assisting local communities that request FRA assistance in addressing adverse impacts of rail mergers (e.g., noise exposure, blocked highway-rail crossings and rail congestion issues) and in implementing new rules for quiet zones. The current breakup of Conrail poses potential major safety issues and FRA continues to work with communities experiencing effects of the BNSF and UP/SP mergers.

TOTAL AND INTERNATIONAL TRAVEL

Question. Please identify total agency travel expenses for each of the last five years, and list the purpose of each foreign trip and associated expenses taken by each SES and political appointee staff person in the last year.

Answer. Total FRA travel obligations for the last five years are as follows:

Fiscal year	*Amount*
1995	$5,978,000
1996	5,673,000
1997	6,273,000

Fiscal year	*Amount*
1998	6,379,000
1999	6,868,000

FRA SES and political appointees attended 10 foreign events in fiscal year 1999 as follows:

Trip purpose	Number of travelers	Total cost
Attend and participate in the Eurailspeed Conference (Berlin)	1	$1,538
Attend and participate in the American Public Transit Commuter Rail/Rapid Transit Conference (Toronto)	3	4,242
Implement technical assistance provision of Memorandum of Cooperation with the Polish Rail System (Warsaw)	3	8,080
Attend and participate in the Border Infrastructure Conference (Tijuana)	1	1,400
Assess policy and procedures for shared use of track (Karlsruhe)	1	1,471
Attend and participate in Safety Conference (Buenos Aires)	1	458
Attend and participate in Transport Canada meeting (Montreal)	1	776
Attend and participate in Transport Canada meeting (Toronto)	1	885
Attend and participate in Transport Canada meeting (Ottawa)	1	818
Attend and participate in International Railway Safety Conference (Banff)	1	1,690
Total	14	21,358

FUNDS FOR PROGRAM EVALUATION

Question. Please prepare a table that outlines the current base level funding, if any, for each of the six initiatives outlined under this requested increase (highway-rail grade crossing closure study, highway-rail grade crossing warning device study, safety integration plan merger surveillance tracking, study to amend passenger car safety standards, switching operations fatality analysis study, and safety and health committee support). Indicate the amount of the fiscal year 2001 request, and any planned outyear costs (if known).

Answer. The information follows:

[In thousands of dollars]

	Current base funding	Fiscal year 2001 request
Highway-rail grade crossing closure study	.....	100
Highway-rail grade crossing warning device	.....	100
Safety integration plan surveillance of mergers tracking	.....	[1] 150
Study to amend passenger car safety standards	.....	100
Switching operations fatality analysis study	.....	35
Safety and health committee support	.....	[2] 13
Total—Program Evaluation	.....	500

[1] This amount is required annually for five years (fiscal year 2001—fiscal year 2006).

[2] This amount is required annually and would be adjusted to reflect inflationary costs and new OSHA Safety and Health requirements, as new regulations are issued.

FISCAL YEAR 2000 IT INITIATIVE FUNDING

Question. What is the base level for the IT initiative? Please break out personnel related costs and program funding.

Answer. In fiscal year 2000, FRA was appropriated $732,000 for the IT initiative—$689,000 in program costs and $43,000 in personnel related costs.

COST OF ANNUALIZED FTE FOR IT PROJECT

Question. How much of the requested increase for the IT initiative supports annualization of the new position approved in fiscal year 2000?

Answer. A total of $35,000 is included in the fiscal year 2001 request for the annualized FTE.

IT INITIATIVE—IMPACT OF FIVE-YEAR VS FOUR-YEAR PLAN

Question. As directed by the conferees in the fiscal year 2000 conference report, FRA provided supplementary materials with the fiscal year 2001 budget request which detailed the agency's spending plan for the FRA-wide IT initiative. The total cost of this initiative is $9,946,000 over four years (fiscal year 2000-fiscal year 2003). If budgetary constraints forced the program implementation to be spread over five years, what adjustments would be made to the fiscal year 2001 program budget?

Answer. Specific adjustments cannot be determined without knowing if funding constraints would be imposed in fiscal year 2001 or outyears. If reductions were made to the fiscal year 2001 request, FRA would be forced to delay the start of the data mart initiative and possibly the detailed transition plan to an ATM backbone.

BASE FUNDING FOR WEB-SITE SUPPORT

Question. What is the base level funding for web-site support? Please break out personnel related costs and program funding.

Answer. There are no base funds for web-site support in fiscal year 2000. Work has been absorbed by staff in various program offices. However, due to the increasing workload in this area and the need for technical expertise in enhancing and expanding FRA's web-site, FRA cannot continue to divert staff from program work to IT work, nor continue to lag behind other DOT agencies in providing up-to-date web-site information. FRA needs dedicated staff or contract support, for this new IT tool. FRA is requesting $310 thousand in contract support in fiscal year 2001.

FRA SAFETY WEBSITE—NEW APPLICATIONS

Question. Please detail the new applications that would be added to the safety portion of the FRA website with a funding increase of $300,000 (include associated costs for each).

Answer. The FRA Safety Data web page provides both the FRA and outside users with charts, graphs, dynamic programs where users can build their own requests for information, and retrievable databases. The FRA also has a secure page for internal use, such as Complaint Investigations and individual inspections by inspector.

There are a number of new Internet website applications which FRA would like to offer. First, FRA has started collecting information about railroad activity by county. This information could be displayed on the Internet website with the accident and inspection information. The addition of this information will provide FRA management with a better picture of railroad activities and resource considerations: approximate cost $145,000.

The highway-rail grade crossing inventory data is already on the web site. However, many times the requestor does not know the crossing identification number. A new search application would allow the user to find any highway-rail crossing on a map with street names and railroad tracks. The user could then select that crossing and get pertinent information (i.e., accidents, if crossing has a hump, number of trains, etc.). One added benefit is that concerned citizens can be alerted to crossings that have high exposure to accidents: approximate cost $55,000.

Finally, the current highway-rail crossing inventory is completed separately by states and railroads using FRA-supplied client software. This information is mailed into FRA for updating the inventory database. FRA would like to develop a new application that allows states and railroads to complete the highway-rail grade crossing inventory on FRA's Internet website. This would allow states and railroads to communicate quickly with each other on changes to highway-rail crossing information: approximate cost $100,000.

INCREASE FOR EMPLOYEE DEVELOPMENT

Question. What is currently spent annually on employee development (for fiscal years 1998, 1999, and budgeted for 2000 and 2001)? Why is an increase of $660,000 needed above the base funding for fiscal year 2001?

Answer. FRA obligated $384 thousand and $464 thousand for training or employee development in fiscal year 1998–1999 respectively. A total of $662 thousand is budgeted in fiscal year 2000.

FRA is requesting a total of $1.34 million in fiscal year 2001, an increase of $678 thousand over fiscal year 2000. Of this amount, $9 thousand is related to the requested ten new positions and $660 thousand is needed to enhance FRA's employee development program and workforce planning activities.

Currently, FRA's training budget reflects only 1 percent of its annual payroll as compared to 2.65 percent provided by private industries and other Federal entities.

The requested increase will allow FRA to increase its training budget to approximately 2 percent of its payroll. More important, it will allow FRA to begin developing a comprehensive workforce planning strategy that addresses skills assessment and training, recruitment and retention of employees, diversity and other activities that support both organizational and individual goals. Due to the robust economy and resulting competition for skilled professionals, the aging workforce (more than 50 percent of FRA's employees are over 48) and the impact of technology on work conditions and skills, it is critical for FRA to begin planning for what the Comptroller General has described as the "human capital crisis" in the Federal Government.

FISCAL YEAR 1999 EMPLOYEE DEVELOPMENT ACTIVITIES

Question. Please detail all employee development activities in fiscal year 1999, describing each conference, class, workshop or training session; number of FRA employees attending; and cost. What is the budgeted funding level for employee development in fiscal year 2000 and requested for fiscal year 2001?

Answer. The FRA offers and encourages annual participation in a variety of learning and development opportunities to its employees, e.g., off-the-shelf, in-house and technical training. FRA's employee development or training is for the most part, managed at the office level and there is no central source for detailed data. Actual total obligations for training in fiscal year 1999 were $384 thousand. The FRA also supports and provides for tuition reimbursement, as appropriate.

A total of $662 thousand and $1.34 million is budgeted in fiscal year 2000 and 2001 respectively. The requested increase in fiscal year 2001 will allow FRA to continue individual training and begin to coordinate agency-wide career development programs that will meet the needs of the organization.

FEDERAL COMPLIANCE AND ENFORCEMENT PROGRAM

Question. Please list the number of enforcement actions, the amount of civil penalty assessments, the amounts collected or settled, and the number and types of violation reports submitted for each of the past three years and relate these measures to your continuing efforts proposed for fiscal year 2001. What percentage of these actions have come from federal inspectors and what percentage from state inspectors?

Answer. The tables below reflect the number of cases in which FRA assessed an initial penalty for fiscal years 1997–1999, the aggregate penalty assessment in those cases, the number of cases closed, the amounts collected, and the number and types of violation reports received from inspectors, with a breakdown of the percentage of those reports received from state and Federal inspectors. Cases transmitted in a given year are often settled in a following year, so the amounts assessed in a given year do not correlate directly with the amounts collected in the same year. These tables demonstrate a substantial civil penalty program that will continue to be a major activity of FRA inspectors and attorneys in fiscal year 2001. These enforcement actions directly support achievement of the agency's safety goals.

CASES TRANSMITTED

Fiscal year	No. of cases	Dollars assessed
1997	1,014	$7,531,250
1998	1,022	9,991,250
1999	958	8,741,000

CASES CLOSED

Fiscal year	No. of cases	Amount collected
1997	972	$3,792,380
1998	1,482	5,213,595
1999	1,122	6,046,050

NUMBER OF VIOLATION REPORTS SUBMITTED BY TYPE

Type	Fiscal year		
	1997	1998	1999
AD	94	90	52
AR	128	142	286
BW	2	1	3
EP	5	.....	.....
EQ	29	37	21
FCS	224	178	298
GC	24	44	37
GS	.....	.....	2
HMT	358	406	291
HS	213	146	211
HSR	370	453	106
LI	363	411	217
REM	16	2	2
ROP	25	38	17
ROR	4	5	4
RSP	13	3	3
RW	4	36	20
SA	358	836	297
SI	72	42	47
TS	66	82	93
Total	2,368	2,952	2,007
Federal Inspectors (percent)	88	89	86
State Inspectors (percent)	12	11	14

FISCAL YEAR 1999 SAFETY INSPECTIONS

Question. How many miles of track, freight cars, locomotives, and track miles with signals and train control systems were inspected last year? Please compare this level of inspection activity with that achieved during the two preceding years. What changes in emphasis are envisioned for fiscal year 2001 and how does the budget request demonstrate those changes?

Answer. Below is a comparison of preliminary 1999 inspection data with that of the previous two years. FRA collects the number of signal and train control devices inspected each year, but not the number of track miles with signal and train control systems.

	1999 [1]	Percent change from 1998	Percent change from 1997
Track Miles Inspected	227,915	−10.0	−8.3
Freight Cars Inspected	599,376	+5.8	+5.9
Locomotives Inspected	24,819	+10.2	+12.0
Signal Units Inspected	93,842	+25.7	+30.3

[1] Preliminary data.

A total of 12,600 track inspections were performed in 1999, which represents a slight increase of 102 inspections above the number performed in 1998. Despite the 10 percent decline in track miles inspected, 73,000 defects were detected in 1999, which represents a 15.7 percent increase in defects from the previous year. Finding more defects over less trackage is an indication that the "Focused Enforcement" policy of FRA's Safety Assurance and Compliance program is working. It is also an indication that the ever increasing amounts of freight traffic are taking a toll on the nation's track structure.

The 10 percent decline in the number of track miles inspected can be attributed to two factors. First, with the increase in railroad traffic, it becomes increasingly

difficult to secure inspection time on the track. Second, it takes longer to perform track inspections on a section of track with many defects than on a track section with few defects. The track inspector often is required to stop and examine a defect, recording pertinent information and assuring that proper remedial action occurs. Because FRA inspections have been successfully targeted on rail lines with a greater number of defects, fewer miles of track were inspected, despite a slight increase in the number of inspections.

FRA will continue to leverage its inspector resources by coordinating the Safety Assurance and Compliance Program (SACP) and site-specific inspection duties in the most effective way. The goal of SACP and the site-specific inspection program is to improve rail safety by reducing systemic hazards in rail facilities, equipment, rolling stock, and operations. FRA believes that it has achieved the proper balance between the SACP and site-specific inspections.

SACP CHALLENGES

Question. Under the SACP, how many Class I and Class II railroads have been analyzed to date? How many railroads have had two SACP reviews? How many additional railroads need to be reviewed for the first time under the SACP? What are the successes and remaining challenges associated with the SACP? How does the fiscal year 2001 budget attempt to improve the SACP?

Answer. Since the inception of the SACP in 1995, the process has been aggressively implemented throughout the railroad industry to include all Class I carriers, a substantial number of Class II carriers, commuter rail authorities (under FRA's jurisdiction), and switching and terminal operators. In recent years, efforts have been expanded to incorporate the hundreds of short line carriers under various SACP related initiatives. With the transformation of the SACP process from a strictly audit review (with specific time frames) to the present ongoing partnership approach, the principles of SACP have been integrated into the Office of Safety's compliance and enforcement procedures. Routine inspection activities and those inspections of a "SACP nature" have now been merged together, for all practical purposes, on Class I railroads. As a result, SACP inspections are continuously underway on large rail carriers' properties. Consequently, a quantitative measurement of the number of SACP examinations or audits per carrier provides no indication of the effectiveness of the process. Effectiveness is measured by improvements to a carrier's and the railroad industry's safety record. For example, between 1993 and 1999, the railroad industry reported the following safety improvements: employee on duty fatalities declined 34 percent, employee-on-duty casualties fell 45 percent, highway-rail grade crossing fatalities dropped 36 percent, and rail-related fatalities declined more than 28 percent.

The success of SACP extends beyond the important safety indices of reductions in injuries and fatalities. Dramatic changes in the safety culture are occurring within the industry. As a consequence, changes are occurring in disciplinary procedures, measures to address fatigue, deadhead transportation issues, and staffing considerations.

The challenges facing SACP are complex. These include: (1) furthering the culture change, a slow and laborious task but one essential to the future of the industry; (2) refining the SACP process to ensure the participation of all employees, from the executive level to the newly hired rank-and-file employee; and (3) addressing complicated issues such as work/rest schedules, train lineup predictability, etc.

The fiscal year 2001 budget request will significantly help to expedite meeting the above challenges by providing: (1) additional travel funds to reach more short line carriers, (2) additional staff—to address workload demands, (3) additional IT and contract support funds—to help develop more comprehensive SACP related data bases and program evaluation initiatives, and (4) additional support for special outreach programs such as grade crossings and fatigue.

IMPACT OF SACP—FISCAL YEAR 1997–1999

Question. Please provide quantitative measures to indicate trends in railroad safety, using a variety of measures of safety performance for each of the last three years. What do you suggest is the role of the SACP in the improvement of safety statistics?

Answer.

CASUALTIES IN ACCIDENTS/INCIDENTS

Year	Fatalities	Injuries	Total casualties
1997	1,063	11,767	12,830
1998	1,008	11,459	12,467
1999 [1]	915	11,309	12,224

[1] Preliminary data.

ACCIDENTS/INCIDENTS

Year	Train accidents	Other incidents	HWY-rail xing impacts	Total accidents/ incidents
1997	2,397	10,437	3,865	16,699
1998	2,575	10,420	3,508	16,503
1999 [1]	2,661	10,161	3,420	16,242

[1] Preliminary data.

ACCIDENTS/PROPERTY DAMAGE

[Dollars in thousands]

Year	Train accidents	Total train accidents damage	Accident/ million train-miles
1997	2,397	$225,723	3.54
1998	2,575	248,292	3.77
1999 [1]	2,661	260,660	3.74

[1] Preliminary data.

HIGHWAY-RAIL CASUALTIES

Year	Deaths	Injuries	Total casualties
1997	461	1,540	2,001
1998	431	1,303	1,734
1999 [1]	399	1,360	1,759

[1] Preliminary data.

HIGHWAY-RAIL ACCIDENTS/INCIDENTS

Year	Accidents/ incidents	Accidents/ million train miles
1997	3,865	5.71
1998	3,508	5.14
1999 [1]	3,420	4.81

[1] Preliminary data.

CASUALTY RATES FOR EMPLOYEES ON DUTY

Year	Total casualties	Casualties/ 200,000 employee work-hours rate
1997	8,332	3.31
1998	8,425	3.27
1999 [1]	8,451	3.36

[1] Preliminary data.

TOTAL TRESPASSER CASUALTIES (EXCLUDING HIGHWAY-RAIL CROSSINGS)

Year	Deaths	Injuries	Total casualties
1997	533	516	1,049
1998	536	513	1,049
1999 [1]	467	433	900

[1] Preliminary data.

Under SACP, examination of railroad compliance with Agency rules is more comprehensive than with site-specific inspections. SACP is a multi-discipline safety audit, whereas site-specific inspections usually involve only a single inspection discipline. In addition, compliance agreements under SACP safety audits usually apply across the entire railroad property. Compliance with a site-specific inspection may only apply to a particular point on the railroad property.

FRA believes that comprehensive safety examinations under SACP are contributing to the improvement in railroad safety statistics. Railroad operations are becoming more complex as the industry strives to attract traffic from overcrowded highways. Advanced train-control systems are being developed and tested under operating conditions, and electronic braking is being tried on some equipment. New types of equipment are being introduced to handle various types of traffic or to conduct maintenance operations more efficiently. These have complex, computerized safety systems, some of which are themselves integral parts of safety systems composing the entire railroad.

In addition, many of the issues affecting railroads over the next few years are systemic. For example, the recent Burlington Northern/Santa Fe and Union Pacific/Southern Pacific mergers and the Surface Transportation Board's approval of the acquisition of Conrail by Norfolk Southern and CSX Transportation (CSXT) all pose safety issues resulting from the blending of different corporate cultures and reconciliation of different operating rules and practices. Systems approaches to safety inspections are necessary to address these issues.

FRA'S SACP EXPERIENCE WITH SMALL RAILROADS

Question. What is FRA's experience with the SACP as applied to smaller railroads?

Answer. SACP uses a rail labor/management/FRA partnership approach in identifying and solving safety concerns within the railroad industry. The essential components of this approach—issue identification, review of options for solution, implementation and monitoring techniques—are utilized regardless of the category (Class I, II, etc.) of a carrier. However, application of these components is modified in recognition of the specific operating characteristics of a small (short line) carrier versus that of a larger carrier.

In expanding the SACP process to short line carriers, the Office of Safety has initiated a new approach. Various regional partnerships are being formed between small railroads, state DOT's, the American Short Line and Regional Railroad Association, and FRA to focus on the safety related concerns of these carriers. For example, the Northeast Short Line Railroad Council, which is comprised of representatives of the railroad related entities located in the territories of FRA's Region One and Two, is currently addressing the impact of hours of service, roadway worker, and locomotive horn issues on the operations of short line carriers. A similar council has been established in FRA Region Three. Other councils are in the process of being formulated throughout the remainder of FRA's regions.

Attention to the safety concerns of short line carriers is an essential component of the Office of Safety's overall approach for ensuring that elements of the railroad industry are in compliance with Federal rules and regulations. The SACP process and its consensus approach to alleviating safety-related problems is significantly contributing to safer practices in the industry and to the safety of employees for all carriers.

RAILROAD SAFETY ADVISORY COMMITTEE

Question. Please break down all expenses associated with the RSAC, including facilities, mailings, equipment, contract support, and the "other" support costs. Please further specify exactly how fiscal year 2000 and fiscal year 2001 monies were or will be used for RSAC. How much is requested for fiscal year 2001.

Answer. FRA is requesting $200,000 for RSAC in fiscal year 2001, the same level as in fiscal year 1999 and fiscal year 2000. Funding supports the following:

[In thousands of dollars]

Activity	*Amount*
Travel	5
Facilitation	10
Contract Support	70
Training	5
Space & Audio Visual	65
Supplies, Printing & Mailing Services	44
Interpreter Services	1
Total	200

The RSAC is comprised of voting representatives from 27 organizations. Since RSAC was chartered on March 25, 1996, an estimated 800 full Committee, Working Groups and Task Force members and alternates have participated in more than 175 meetings to address 15 tasks. Given the magnitude of the resources dedicated to this successful process, the $200 thousand requested for Federal support is nominal.

RULEMAKING ACTIVITY IN PAST YEAR

Question. Please list all final regulations, ANPRM's, NPRM's and any new regulatory projects issued or pursued since last year.

Answer. The information follows.

Final rules issued in 1999

—Passenger Equipment Safety Standards (5/12/99)
—Steam Locomotive Inspection-general revision (11/7/99)
—Locomotive Engineer Certification-general revision (11/8/99)

Proposed rules issued in 1999

—FRA Policy Statement—Jurisdiction Over Railroad Passenger Operations and Shared Use of the General system (5/25/99)
—FRA Policy on Jurisdiction (11/1/99)

FRA did not pursue any new major regulatory projects in 1999. However, FRA did continue work on a number of other important rulemakings, including

—Train Horns (Whistle Bans)
—PTC performance standards
—Cab working conditions (sanitation, noise, temperature)
—Event recorders—data survivability and other issues
—Locomotive crashworthiness
—Power Brakes

REGULATORY BACKLOG

Question. What is the current regulatory backlog? What are the nature and status of each of those projects? Please identify which of those are statutorily mandated, and when those are due for final issuance.

Answer. Enclosed is an April 2000 summary of FRA's pending regulatory workload, showing the nature and status of each of the regulatory projects. The projects that are statutorily mandated are:

—*Freight Power Brake Rules.*—The statutory deadline for revision of the power brake rules was December 31, 1993. FRA issued rules on passenger train brakes as part of its passenger equipment standards, issued in May 1999. One of the major mandates in the statute concerned equipping trains with two-way

end-of-train devices. FRA issued a rule requiring those devices in January 1997, and railroads actually equipped trains with them prior to the deadline for compliance stated in the statute. Remaining freight power brake issues were dealt with in a proposed rule issued in 1994. FRA withdrew that proposed rule and tasked RSAC with developing rules in 1996. In June 1997, with RSAC deadlocked on the rule, FRA withdrew the task from RSAC. FRA published a proposed rule on September 9, 1998, and, after public hearings and comment, is preparing a final rule. The final rule is under review within the Administration.

—*Use of Train Horns at Grade Crossings.*—The Swift Rail Development Act of 1994 required FRA to issue regulations providing for the use of train horns at highway-rail crossings. The final rule on the most hazardous crossings was due on November 2, 1996, and a final rule on other crossings was due on November 2, 1998. This second final rule would require the sounding of the locomotive horn at a crossing unless alternative safety measures are in place to compensate for its value as a warning to motorists. FRA released a report on the national impacts of local whistle bans on June 1, 1995, and has conducted an extensive program of public outreach to make communities aware of the forthcoming rulemaking and to seek information on supplementary safety measures that would support the allowance of quiet zones in communities sensitive to train horn noise. Numerous congressional offices encouraged FRA to continue outreach and data collection. FRA advised the Congress that the deadline for an initial final rule would not be met. Immediately prior to adjournment, the 104th Congress enacted the FAA reauthorization bill (PL 104–264; 10/9/96), which included amendments to the original whistle ban legislation. In general, the legislation affirms the latitude available to the Secretary to provide for phase-in of regulations and focus on safety results. FRA issued the proposed rule January 13, 2000. Written comments are due May 26, 2000. Public hearings are being held to receive oral comments. FRA published a Draft Environmental Impact Statement (DEIS) for the proposed regulation in December 1999. FRA's proposed rule strives to achieve the law's important safety objective in a way that will provide communities maximum flexibility and ample opportunity to maintain quiet.

In addition to the statutorily mandated rules, among the most important pending rulemakings are:

—Positive train control.
—Locomotive cab working conditions.
—Locomotive crashworthiness.
—Event recorder revisions.

FRA expects to issue proposed or final rules on each of these subjects in 2000. The enclosed overview contains specifics on each of these projects.

OVERVIEW OF THE RAILROAD SAFETY REGULATORY PROGRAM AND STANDARDS-RELATED PARTNERSHIP EFFORTS

Legend:
ANPRM—Advance Notice of Proposed Rulemaking
Italics—Indicates project has been identified for development through the Railroad Safety Advisory Committee or a similar forum for collaborative rulemaking
NPRM—Notice of Proposed Rulemaking
RSAC—Railroad Safety Advisory Committee
SACP— Safety Assurance and Compliance Program

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NOTE

Centralized Docket Management System.—Dockets established after October 7, 1998, are available on the DOT Centralized Docket Management System facility and can be accessed over the Internet (http:://dms.dot.gov). Detailed information is available at the Web site to assist in viewing documents.

Revised Docket Filing Procedures for FRA Rulemaking and Adjudicatory Dockets.—Final Rule (64 FR 70193)—This final rule amends certain FRA rules to provide accurate information to the public regarding filing requirements for FRA proceedings. The final rule is effective 2/14/00.

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SUMMARY OF CONSENSUS RULEMAKING EFFORTS

Roadway Worker Safety.—Consensus achieved in formal negotiated rulemaking; final rule published 12/16/96; effective 1/15/97. Denial of AAR and APTA petitions for reconsideration published 4/21/97.

Passenger Equipment Safety Standards.—NPRM based on working group recommendations was published 9/23/97. Public hearing held 11/21/97. Written comments were due 11/24/97. Working group met 12/15–12/16/97 (general issues) and 1/6/98 (intercity and high speed issues). Final rule published 5/12/99 (64 FR 25540).

Passenger Train Emergency Preparedness.—NPRM based on working group recommendations was published 2/24/97 with significant additions, and a notice of public hearings was published 3/6/97. Public hearings were held in Chicago on 4/4/97 and in New York City on 4/7/97. Written comments were due by 4/25/97. Working group met 8/28/97 and reached agreement in principle on changes for incorporation into the final rule. Final rule published 5/4/98 (63 FR 24630).

Railroad Safety Advisory Committee:

Last full Committee meeting 1/28/1999.

Last RSAC Working Group Activity Update published in Federal Register 12/17/99 (64 FR 707656).

Task No.	Subject	Status
96–1	Power Brake Regulations, freight, general revision.	Working group charter extended to 1/15/97 to produce NPRM; impasse reached at 12/4/96 meeting, and subsequent efforts to renew talks were not successful. FRA withdrew task at 6/24/97 meeting. FRA published second NPRM 9/9/98 (63 FR 48294) reflective of what FRA has learned through the collaborative process. Public hearings 10/26/98 and 11/13/98; technical conference 11/23–24/98. Submission of written comments date due extended to 3/1/99. Public meeting 5/27/99 on FRA MPE database. FRA is preparing the final rule.
96–2	Track Safety Standards, general revision.	Consensus achieved; in balloting that concluded 11/21/96, RSAC voted to accept working group report and recommend NPRM. NPRM published 7/3/97; public hearing held 9/4/97; comment period closed 9/15/97. Final rule published 6/22/98; effective 9/21/98. FRA prepared final rule amendment on Gage Restraint Measurement System (GRMS) standards. Contingent upon Working Group approval, the standards will be forwarded to the full RSAC for consideration.
96–3	Railroad Communications (including revision of Radio Standards and Procedures).	Final meeting of working group was held 1/23/97. Working group provided consensus NPRM to RSAC at 3/24/97 meeting. RSAC voted to accept the NPRM and forward to the Administrator in voting concluded 4/14/97. NPRM published 6/26/97; comment period closed 8/25/97. Final rule published 9/4/98 (63 FR 47182).
96–4	Tourist Railroads	Open task to address needs of tourist and historic railroads; working group monitored steam task.
96–5	Steam-Powered Locomotives, revision of inspection standards.	Tourist & Historic Working Group met with task force representatives 9/3/97. NPRM was approved by full committee in voting that concluded 2/17/98. NPRM published 9/25/98 (63 FR 51404). Public hearing held 2/4/99. Task Force developed recommendations in response to comments received; Working Group consensus; approved by full Committee voting ballot 9/29/99. Final rule published 11/17/99 (64 FR 62828).
96–6	Locomotive Engineer Qualification and Certification, general revision.	Task accepted 10/31/96; first working group meeting held 1/7–9/97. NPRM approved by full committee 5/14/98. NPRM published 9/22/98 (63 FR 50625). Final rule published 11/8/99 (64 FR 60966).
96–7	Track Motor Vehicle and Roadway Worker Equipment.	Task accepted 10/31/96. Task Force of Track Safety Standards Working Group is finalizing a proposed rule. Contingent upon Working Group approval, the proposed rule will be forwarded to the full RSAC for consideration.
96–8	Locomotive Crashworthiness and Working Conditions (planning task).	Planning task accepted 10/31/96; planning group met 1/23/97; two task statements were accepted by the full Committee at 6/24/97 meeting [see 97–1, 97–2]. Planning task is COMPLETED.
97–1	Locomotive Crashworthiness	Task accepted 6/24/97; working group held initial meeting 9/8–9/9/97. Established task force to review collision history and design options. Working group reviewed results of research and is drafting standards for freight and passenger locomotives.

Task No.	Subject	Status
97–2	Locomotive Cab Working Conditions.	Task accepted 6/24/97; working group held initial meeting 9/10–11/97. Noise and Temperature task forces established. Draft sanitation NPRM under review by Working Group. Noise Task Force preparing draft recommendations for noise exposure requirements.
97–3	Event Recorders (data survivability, inspection, etc.).	Task accepted 6/24/97; working group met 9/12/97. Task force established. Working group and task force actively meeting; draft proposed rule under review.
97–4, 97–5, 97–6	Positive Train Control	Tasks accepted 9/30/97 and assigned to single working group. Standards Task Force is working on proposed NPRM for positive train control performance standards. Data and Implementation Task Force completed report on the future of PTC systems; report accepted for forwarding to FRA by full Committee vote at 9/8/99 meeting.
97–7	Calculation of Damages for Reportable Train Accidents.	Task accepted with modification 9/30/97. Working group has been formed. Initial meeting held 2/8/99.
00–1	Blue Signal Protection of Workmen.	Task accepted 1/28/00; working group being formed.

SAFETY RULES AND REPORTS—GENERAL

Accident/Incident Reporting

Summary.—The Rail Safety Enforcement and Review Act of 1992 barred FRA from adjusting the monetary threshold for reporting of train accident until the methodology was revised. In addition, FRA identified the need to comprehensively revise these regulations, which had not be revised since 1974.

Deadline.—The report of the Committee of Conference on the Department of Transportation and Related Agencies Appropriation Act, 1996, directed FRA to issue a final rule in this proceeding by 6/1/96.

History.—An NPRM was issued 8/19/94, followed by public hearings and written comment. A public regulatory conference was convened 1/30–2/3/95 in an effort to resolve outstanding issues. A notice of decision to issue a supplemental NPRM was published 7/3/95, but was withdrawn in a notice published on 1/24/96.

Status.—Final rule was issued 5/30/96 and published 6/18/96 (61 FR 30940). Stay requests were denied, and technical amendments were published 11/22/96 (61 FR 59368). A notice of availability of custom software was also published 11/22/96 (61 FR 59485). On 12/16/96, the Administrator signed final rule amendments, which were published 12/23/96 (61 FR 67477). Final rule became effective 1/1/97. Industry training partnerships have been executed.

Next steps.—FRA offered RSAC a task on 9/30/97 to review the definition of events required to be reported as train accidents, as requested by the Committee on 6/24/97. By request of the Committee, the task was limited to determination of damages qualifying an event as a reportable train accident. A working group has been formed and held its initial meeting 2/8/99.

Blue Signal Protection

Summary.—On 8/16/93, FRA published a final rule permitting one or more utility employees to associate themselves with a train crew for the purpose of performing normal operating functions that require employees to go on, under or between rolling stock, without use of blue signal protection (which is ordinarily appropriate for mechanical duties). During the proceeding it was noted that rules for locomotive engineers working alone were not clearly defined. FRA published a final rule amendment governing single engineers working alone on 3/1/95, but granted a requested suspension of the amendment on 6/9/95 pending development of additional facts. Since that time, additional blue signal issues have continued to emerge, including application of the requirements to contractors performing the subject functions on railroad property.

Status.—On 10/31/96, the RSAC advised FRA that this project should not be proposed for early tasking, given conflicting demands on the resources of member organizations. RSAC accepted task at the 1/28/00 full Committee meeting.

Bridge Displacement Detection Systems (Report)

Summary.—The Federal Railroad Safety Authorization Act of 1994 required FRA to submit a report on systems to detect bridge displacement of the type that caused the derailment of the Sunset Limited at Mobile, Alabama, 9/22/93.

Statutory deadline.—5/2/96

Status.—A technical evaluation report was published 6/23/94 and made available to the respective committees. A formal report to the Congress is in preparation.

Control of Alcohol and Drug Use; Application of Random Testing and Other Requirements to Train Crews Based Outside the United States Who Engage in Train Operations in the United States

Summary.—FRA applies only part of its regulation on control of alcohol and drug use (49 CFR part 219) to a railroad's train operations in the United States that are performed by train crews whose home terminals are outside the United States ("extraterritorial train employees"). In this notice, FRA proposes to make all of part 219 applicable to extraterritorial train employees who perform train operations in the United States.

Status.—Drafting of the Notice of Proposed Rulemaking is in its final stages, and FRA plans to send it for review soon.

Event Recorder Next-Generation Performance Standards

Summary.—The National Transportation Safety Board has noted the loss of data from event recorders in several accidents due to fire, water and mechanical damage. In issuing final rules for event recorders which became effective 5/5/95, FRA noted the need to provide more refined technical standards. NTSB proposed performance standard for data survivability.

Background.—Conducted an initial meeting of an informal working group comprised of AAR, RPI, and labor, and co-chaired by NTSB and FRA experts, on 12/7/95 to consider development of technical standards. At the RSAC meeting on 7/24–7/25/96, the AAR agreed to continue this inquiry, and on 11/1/6, AAR reported to the RSAC the status of work on proposed industry standards. On March 5, 1997, NTSB issued recommendations regarding testing and maintenance of event recorders as a result of finding in the investigation of the BNSF accident of 2/1/96 at Cajon Pass, California. On 3/24/97, the RSAC indicated its desire to receive a task to consider NTSB recommendations with respect to crash survivability, testing and maintenance.

Status.—RSAC accepted task 6/24/97. Event Recorder working group first met 9/12/97. A task force was established. Draft proposed rule under review. (Task No. 97–3).

Florida Overland Express

Summary.—FRA has received a petition for a rule of particular applicability for operations over a new high-speed railroad between Miami and Tampa via Orlando. The State of Florida had established a dedicated funding stream of $70 million per year towards creation of this new private/public partnership.

Status.—Received petition for rule of particular applicability 2/18/97. FRA issued NPRM 12/12/97 (62 FR 65478). Comment period closed. FRA reviewed comments received and held a public hearing on 11/23/98 to discuss a variety of issues. The State of Florida withdrew its support and funding for this project 1/99, suspending all activity on development. FRA is not currently working on the final rule.

Freight Car Safety Standards; Maintenance-of-Way Cars

Summary.—Cars not in compliance with the Freight Car Safety Standards may be operated at track speed in revenue trains if they are company-owned, stenciled cars. FRA published an NPRM 3/10/94 to close this loophole. FRA requested the Association of American Railroads to amplify its comments by letter of 12/20/94.

Status.—AAR response received 8/4/95 is under review. FRA offered a task to the RSAC to resolve final rule issues on 9/30/97, but objection from the AAR prevented the matter from coming to a vote. FRA will prepare final rule.

Locomotive Crashworthiness and Working Conditions

Summary.—The Rail Safety Enforcement and Review Act of 1992 required FRA to conduct a proceeding regarding locomotive crashworthiness and working conditions and to issue regulations or submit a report. Areas for consideration included structural means of preventing harm to crew members in collisions (collision posts, anticlimbers, etc.) and matters related to safety, health and productivity (e.g., noise, sanitation).

Statutory deadline.—3/2/95

Background.—FRA conducted research, outreach, and a survey of locomotive conditions and finalized a report to the Congress transmitted by letter of September 18, 1996. The report conveyed data and information developed by FRA to date, closed out those areas of investigation for which further action is not warranted, and defined issues that should be pursued further in concert with the industry parties, either for voluntary or regulatory action. On 10/31/96, the RSAC accepted a

preliminary planning task. The Locomotive Crew Safety Planning Group met 1/23/97, and subsequent consultations led to preparation of task statements.

Status.—RSAC accepted two tasks 6/24/97. (RSAC Task 97–1, locomotive crashworthiness; and Task 97–2, locomotive cab working conditions).

Locomotive Crashworthiness.—Working Group met 9/8–9/97 and established a task force on engineering issues that has been active in reviewing collision history and design options. The Working Group has reviewed results of research and is drafting standards for freight and passenger locomotives.

Locomotive Cab Working Conditions.—Working Group met for the first time 9/10–11/97 and established task forces on noise and temperature, which have been working actively. A draft sanitation NPRM is under review by the Working Group. The Noise Task Force is preparing draft recommendations for noise exposure requirements.

Locomotive Engineer Certification; Miscellaneous Revisions

Summary.—The final rule for locomotive engineer certification became effective in 1991, but certain issues were left unresolved. Experience under the rule has raised additional issues. Examples of issues under review include the status of operators of specialized maintenance of way equipment and types of conduct for which decertification is appropriate.

Status.—An interim final rule amendment dealing with agency practice and procedure concerning engineer certification appeals was published 10/12/95. Issues related to procedures on the properties, offenses warranting decertification, periods of decertification, operation of specialized equipment, etc., are pending. The RSAC accepted this task on 10/31/96. The Working Group's initial meeting was held 1/7–1/9/97. Final meeting to review proposed rule language was held 10/7–10/9/97, and task force on hearing and vision met 10/21/97 to finalize language. The full committee voted 5/14/98 to recommend issuance of the NPRM forwarded by the Working Group. The NPRM was published 9/22/98 (63 FR 50625) (RSAC Task 96–6.) The Working Group met to resolve issues presented in public comments, and on 1/28/99 the RSAC voted to transmit recommendations regarding issues for which the Working Group had received comments. The final rule was published 11/8/99 (64 FR 60966); effective date 1/7/00. (FRA Docket No. RSOR–9. Notice 12).

Northeast Corridor (NEC) Signal & Train Control

Summary.—Amtrak is planning operations to 150 mph on portions of the NEC and is implementing improvements to the automatic train control system that will provide positive stop and continuous speed control capabilities. FRA's Northeast Corridor Safety Committee (NCSC) met 9/20/94 and approved a set of performance criteria for the new system.

Status.—On 1/30/97, Amtrak provided to FRA a draft system concept for the Advanced Civil Speed Enforcement System (ACSES), including conditions for operation on designated territories on the south and north ends of the NEC. Final details were received by FRA on 7/9/97. A notice of Proposed Order for the new signal and train control system authorizing speeds to 150 miles per hour (135 mph on the South End with only high-speed trains equipped under "flanking protection") was published 11/20/97 (62 FR 62097), and written comments were due by 12/22/97. As a result of requests, a public hearing was set for 2/17/98 (63 FR 3389), and the comment closing date was extended to 2/24/98. Final Order of Particular Applicability published 7/22/98 (63 FR 39343); effective 8/21/98.

NEC System Safety

Summary.—Mixed passenger and freight operations at speeds to 150 mph have not previously been attempted in this country. Through the Northeast Corridor Safety Committee (or successor), FRA intends to develop system safety criteria for this service territory, integrating existing safety measures and identifying any areas of material risk not previously addressed.

Status.—Timing of project initiation to be determined. Will focus on enhancement and integration of individual railroad system safety plans to address complex NEC operations.

Passenger Equipment Safety Standards

Summary.—The Federal Railroad Safety Authorization Act of 1994 (enacted 11/2/94) required FRA to issue initial passenger safety standards within 3 years and complete standards within 5 years. The agency was authorized to consult with industry parties outside the Federal Advisory Committee Act, making it possible to conduct an informal negotiated rulemaking.

Statutory deadline.—11/2/97 (initial); 11/2/99 (final).

Status.—An initial meeting of the Passenger Equipment Safety Working Group (passenger railroads, operating employee organizations, mechanical employee organizations, and representatives of rail passengers) was held on 6/7/95, and the group met regularly to develop an NPRM. Manufacturer/supplier representatives served as associate members. FRA prepared an ANPRM indicating the issues under review by the working group, which was published 6/17/96 (61 FR 30672). The working group held its final meeting on the NPRM 9/30–10/2/96, having reached consensus on a portion of the issues presented. An NPRM was published 9/23/97 (62 FR 49728). The public hearing was held 11/21/97 (see 62 FR 55204; 10/23/97). Comments were due 11/24/97. Final working group meeting on the initial standards was held 12/15–12/16/97, and an additional meeting on intercity and high speed issues was held 1/6/98. The final rule was published 5/12/99 (64 FR 25540). (FRA Docket No. PCSS–1, Notice No. 5). Following issuance of the "initial" final rule, work will begin on additional passenger equipment safety standards. FRA is reviewing several petitions for reconsideration.

Passenger Train Emergency Preparedness

Summary.—The Federal Railroad Safety Authorization Act of 1994 required FRA to issue emergency preparedness standards for passenger service. Initial standards were required within 3 years and complete standards within 5 years. The agency was authorized to consult with industry parties outside the Federal Advisory Committee Act, making it possible to conduct an informal negotiated rulemaking.

Statutory deadline.—11/2/97 (initial); 11/2/99 (final)

Background: An initial meeting of the working group for passenger train emergency preparedness standards was held on 8/8/95. The group met 2/6–7/96 to develop elements of an NPRM and met jointly with the Passenger Equipment Safety Standards Working Group on 3/26/96 to consider related issues, including the implications of Emergency Order No. 20 and recommendations of the National Transportation Safety Board. The working group included representatives of passenger railroads, operating employee and dispatcher organizations, and rail passenger organizations, and an advisor from the National Transportation Safety Board. The working group approved draft rule text, which was incorporated in an NPRM forwarded for review and clearance. Changes requested during review and clearance were provided to the working group during the week of 12/16/96.

Status.—The NPRM was published 2/24/97 (62 FR 8330), and a notice of public hearings was published 3/6/97 (62 FR 10248). Public hearings were held in Chicago on 4/4/97 and in New York City on 4/7/97. Written comments were due by 4/25/97. The working group met 8/28/97 and agreed in principle to revisions for inclusion in the final rule. The final rule was published 5/4/98 (63 FR 24630), and a correction notice was published 7/6/98 (63 FR 36376). (FRA Docket No. PTEP–1, Notice No. 3).

NOTE.—The following order is closely associated with the two prior entries:

Emergency Order No. 20

Summary.—This order deals with the safety of push/pull and electric multiple unit service. The order was issued 2/20/96 (61 FR 6876; 2/22/96), and amended 2/29/96 (61 FR 8703; 3/5/96). Intercity and commuter passenger railroads were required to adopt operating rules providing for observance of reduced speed where delays are incurred in blocks between distant signals and signals at interlocking or controlled points. Marking of emergency exits and testing of emergency windows was required. Interim system safety plans were required to be filed.

Status.—The order has been fully implemented. On 3/26/96, the Passenger Equipment Safety Working Group and the Emergency Preparedness Working Group met jointly to consider implementation issues and crossover issues with the two rulemaking proceedings and recent recommendations of the National Transportation Safety Board. The American Public Transit Association and it members have undertaken a number of actions in response to the emergency order, including development of comprehensive system safety plans. Codification, revision or termination of provisions will be considered during the second phase of passenger safety standards rulemaking.

Positive Train Control

Evaluation of needs and feasibility (implementation)

Summary.—These tasks involve defining PTC functionalities, describing available technologies, evaluating costs and benefit of potential systems, and considering implementation opportunities and challenges, including demonstration and deployment. (RSAC Tasks 97–4 and 97–5).

Status.—Accepted by RSAC 9/30/97. Please see entry on RSAC summary.

Performance standards for PTC systems

Summary.—Existing signal and train control regulations are built around relay-based controllers and traditional track circuits, but technology is rapidly advancing. This task requires revising various regulations, including 49 CFR Part 236, to address the safety implications of processor-based signal and train control technologies, including communication-based operating systems. The purpose of the effort is to encourage deployment of innovative technology by providing a predictable environment. (RSAC Task 97–6).

Status.—Accepted by RSAC 9/30/97. Please see entry on RSAC summary.

Progress Report to the Congress

Summary.—The Swift Rail Development Act of 1994 required FRA to submit a status report on the implementation of positive train control as a follow-up to the 7/94 Report entitled Railroad Communications and Train Control.

Statutory deadline.—12/31/95

Status.—FRA has provided testimony to the committees of jurisdiction reporting the status of efforts to promote implementation of positive train control. FRA plans to utilize the results of the RSAC PTC working group and task forces efforts to provide an appropriate status report.

Power Brakes

Summary.—The Rail Safety Enforcement and Review Act of 1992 required FRA to revise the power brake regulations. The statute required adoption of requirements for 2-way end-of-train telemetry devices (EOTs) and "standards for dynamic brakes."

Statutory deadlines.—Final rule by 12/31/93; 2-way EOTs to be used on trains operating greater than 30 miles per hour or in mountain grade territory to be equipped by 12/31/97.

Status.—FRA published an NPRM 9/16/94 and conducted six days of public hearings ending 12/94. Due to strong objections to the NPRM, additional options were requested from passenger interests by 2/27/95 and from freight interests by 4/3/95. Further action is as follows:

(1) *Passenger standards revision*.—FRA requested the Passenger Equipment Safety Standards Working Group to incorporate new proposals for revisions of the power brake regulations in the NPRM for passenger equipment safety. Working group proceedings on the elements of the NPRM concluded 10/2/96 without full agreement on power brake elements. See Passenger Equipment Safety Standards for current status.

(2) *Freight standards revision*.—On 4/1/96, the RSAC accepted the task of preparing a second NPRM. The working group initiated its efforts in May, and on 10/31/96 the RSAC extended the deadline for a final report until 1/15/97. At the working group meeting 12/4/96, an impasse was declared, and subsequent efforts to revive discussions were not successful. On May 29, FRA notified the working group by letter that the task will be formally terminated. FRA withdrew task at 6/24/97 full Committee meeting. FRA prepared second NPRM reflective of what was learned through the collaborative process. NPRM published 9/9/98 (63 FR 48294) (FRA Docket No. PB–9, Notice No. 13). (RSAC Task 96–1—terminated). Public hearings were conducted on 10/26/98 and 11/13/98 and a technical conference was held on 11/23–24/98. Final date for submission of comments extended until 3/1/99. FRA is preparing the final rule.

(3) *Two-way end-of-train devices*.—FRA published notice on 2/21/96 that this issue would be separated from the balance of the freight issues and expedited for completion of a final rule. A public regulatory conference was convened 3/5/96 to explore remaining issues, and written comments were due 4/15/96. (Railroads also agreed to an expedited schedule that will ensure application of this technology by 12/15/96 on 2 percent or greater grades and by 7/1/97 for other trains.) The final rule was published 1/2/97 (62 FR 278), (FRA Docket No. PB–9, Notice No. 6), and it became effective 7/1/97. FRA received two petitions for reconsideration ("local train" definition and implementation date for smaller railroads). A notice denying the request to delete the tonnage restriction for local trains and granting extension of the compliance date for railroads with fewer than two million work hours was published 6/4/97 (62 FR 30461). On 11/4/97, held technical conference on petition of American Short Line Railroad Association regarding operation of very light trains over grade territory (see 62 FR 52370; 10/7/97); subsequently granted limited relief and received petition for reconsideration of conditions, which is now under review.

On 1/16/98, FRA published NPRM to clarify application of two-way EOT requirements to intercity passenger trains with express equipment at the rear (63 FR 195). Final rule was issued 5/1/98 (63 FR 24130). (FRA Docket No. PB–9, Notice No. 11).

Note.—On 2/6/96, the Administrator issued Emergency Order No. 18, requiring use by the BNSF of 2-way EOTs or equivalent protection for heavy grade operations over the Cajon Pass (61 FR 505; 2/9/96).

Railroad Communications (including Radio Standards and Procedures)

Summary.—In submitting the required report to the Congress on Railroad Communications and Train Control on 7/13/94, FRA noted the need to revise existing Federal standards for radio communications in concert with railroads and employee representatives.

Status.—On 4/1/96, the RSAC accepted the task of preparing an NPRM, including consideration of communication capabilities required in railroad operations. The working group presented a consensus NPRM to the full Committee on 3/24/97, and the Committee voted to recommend issuance of the NPRM to the Administrator in balloting that ended 4/14/97. NPRM issued 6/11/97 and published 6/26/97 (62 FR 34544) (FRA Docket No. RSOR–12, Notice No. 4). Comment period closed 8/25/97. Final rule published 9/4/98 (63 FR 47182). (FRA Docket No. RSOR–12, Notice No. 5). (RSAC Task 96–3).

Regulatory Reinvention

Summary.—In response to the President's call for regulatory review, elimination and reinvention, FRA took several actions to repeal obsolete regulations and simplify agency processes that affect external customers. Major elements of this effort are included in regulatory revision efforts described under other headings.

Status.—Interim final rule amendments reducing frequency of reporting regarding signal and train control systems (49 CFR Part 233), simplifying review requirements for certain modifications of signal systems (49 CFR Part 235), and making conforming changes regarding inspection of ATC/ATS/ACS (49 CFR Part 236) published 7/1/96 (61 FR 33871). These changes should be finalized early in 1999. FRA is considering inclusion of a legislative proposal to permit flexibility for railroads to make accident/incident reports less frequently than monthly and to eliminate outdated requirements for notarization of reports in the Administration's proposed 1999 rail safety reauthorization legislation.

Roadway Worker Safety

Summary.—In requiring the review of the Track Safety Standards, the Rail Safety Enforcement and Review Act of 1992 required FRA to evaluate the safety of maintenance of way employees. In addition, the Brotherhood of Maintenance of Way Employes and the Brotherhood of Railroad Signalmen petitioned FRA to issue "on-track safety" rules.

Background.—FRA published a notice 8/17/94 initiating a formal negotiated rulemaking. The negotiated rulemaking committee reported a statement of principles 5/17/95 and completed an NPRM draft 8/95. NPRM published 3/14/96 (61 FR 10528); initial written comments were due 5/13/96. Public hearing held 7/11/96.

Status.—The final rule was published 12/16/96 (61 FR 65959); effective 1/15/97. Petitions for reconsideration were denied in a notice published 4/21/97. A consolidated hearing on waiver petitions was held 5/22/97, and written comments were due by 6/9/97. FRA is issuing decisions on individual petitions as investigations and analysis were completed.

Safety Integration Plans

Summary.—In response to the proposed acquisition of Conrail by Norfolk Southern and CSX Transportation, FRA has suggested, and the Surface Transportation Board has required, that the petitioners file with the Board of Safety Integration Plans (SIPs). In coordination with the Board, FRA proposed regulations requiring preparation and FRA review of SIPs in connection with future railroad mergers.

Status.—FRA and the STB jointly issued an NPRM 12/31/98 (63 FR 72225) to institutionalize the SIP process to ensure that proper safety planning and safety investments are undertaken during a merger. The proposed rule spells out the types of transactions that will require SIPs and outlines the roles of FRA and the STB in overseeing the SIP process.

Small Railroads; Interim Policy Statement

Summary.—The Small Business Regulatory Enforcement Fairness Act of 1996 amended the Regulatory Flexibility Act and required, among other things, that each agency establish small business communication and enforcement programs.

Statutory deadline.—3/29/97

Status.—Interim policy statement published 8/11/97 (62 FR 43024). FRA is reviewing comments received and developing a final policy statement. Public meeting

to address definition of "small entity" was held on 9/28/99. FRA is preparing a final policy statement.

Steam Locomotives

Summary.—A committee of steam locomotive experts from tourist and historic railroads has sought a partnership with FRA to revise the steam locomotive regulations. Proposed revisions would relieve regulatory burdens while updating and strengthening the technical requirements.

Status.—Revision of the Steam Locomotive Inspection regulations was tasked to the RSAC on 7/24/96. A task force of the Tourist & Historic Railroads Working Group is actively working toward finalization of a final rule. NPRM rule text agreed upon within the task force was approved by the Tourist and Historic Working Group on 9/3/97 and provided to the RSAC on 9/30/97. The full RSAC approved the consensus NPRM by mail ballot 2/17/98. NPRM published 9/25/98 (63 FR 51404) (FRA Docket No. RSSL 98–1, Notice No. 1). (RSAC Task 96–5). Public hearing held 2/4/99. Task Force formulated recommendations in response to comments received. The recommendations were accepted by the working group and the full Committee voted to incorporate the recommendations in the final rule. The final rule was published 11/17/99 (64 FR 62828) (FRA Docket No. RSSL 98–1, Notice No. 3); effective date 1/18/00.

Track Motor Vehicle and Roadway Equipment Safety

Summary.—A 1990 petition to FRA from the Brotherhood of Maintenance of Way Employes asked FRA, among other requests, to propose standards for MOW equipment related to the safety of persons riding or operating that equipment. FRA elected not to pursue that issue at that time given other pending workload. However, this issue was renewed during the deliberations of the RSAC Track Safety Standards Working Group.

Status.—On 10/31/96, the RSAC accepted a task of drafting proposed rules for the safety of this equipment. A task force of the Track Safety Standards Working Group was formed to address this issue. The task force has met several times. The task force is finalizing a proposed rule. Contingent upon the approval of the working group, the proposed rule will be presented to the full RSAC for consideration at the 1/28/00 meeting. (RSAC Task 96–7).

Tourist Railroad Report/*Review of Regulatory Applicability*

Summary.—The Swift Rail Development Act of 1994 required FRA to submit a report to the Congress regarding FRA's actions to recognize the unique factors associated with these generally small passenger operations that often utilize historic equipment.

Statutory deadline.—9/30/95

Status.—Report submitted to the Congress 6/10/96. The RSAC authorized formation of a Tourist and Historic Railroads Working Group 4/1/96. The working group held its initial meeting 6/17–6/18/96 and has monitored completion of the steam task. (RSAC Task 96–4).

Track Safety Standards

Summary.—The Rail Safety Enforcement and Review Act of 1992 required FRA to revise the Track Safety Standards, taking into consideration, among other things, the "excepted track" provision. Other prominent issues include updating the standards to take advantage of research findings for internal rail flaw detection and gage restraint measurement. FRA also proposes to adopt track standards for high-speed service.

Statutory deadline.—Final rule by 9/1/95.

Background.—FRA published an ANPRM 11/6/92 and conducted workshops in the period 1/93–3/93. The Railroad Safety Advisory Committee accepted task of preparing an (NPRM) on 4/2/96. The Track Safety Standards Working Group reported a draft NPRM to the full committee on 10/31/96. In balloting that concluded 11/21/96, RSAC voted to accept the working group report and recommend issuance of the NPRM.

Status.—NPRM signed 6/19/97 and published 7/3/97 (62 FR 36138) (FRA Docket No. RST–90–1, Notice No. 5). Hearing held 9/4/97; comment period closed 9/15/97. Additional comment was invited regarding certain high-speed track geometry issues by notice of 12/12/97 (62 FR 65401) not later than 12/22/97. Final rule published 6/22/98 (63 FR 33991) (FRA Docket No. RST–90–1, Notice No. 8); effective 9/21/98. FRA prepared final rule amendment on Gage Restraint Measurement System (GRMS) standards. (RSAC Task 96–2). Contingent upon approval of the Track Safety Standards Working Group, the standards will be forwarded to the full RSAC for consideration at the 1/28/00 meeting.

U.S. Locational Requirement for Dispatching of U.S. Rail Operations

Summary.—New 49 CFR Part 241 would require all dispatching of railroad operation that occur in the United States to be performed in the United States, with exceptions for emergency situations and for the few limited track segments that were being dispatched from foreign countries as of December 1999.

Status.—Drafting of the Interim Final Rule has been completed, and FRA has sent it for review.

HIGHWAY-RAIL CROSSING SAFETY

Commercial Driver Disqualification—Railroad-Highway Grade Crossing Violation

Summary.—To enhance the safety of commercial motor vehicle (CMV) operations on our nation's highways and complete action initiated in response to the requirements specificed in section 403 of the ICC Termination Act of 1995, the Federal Highway Administration (FHWA) revised its regulations (49 CFR Parts 383 and 384) to require that CMV drivers who are convicted of violating Federal, State, or local laws or regulations pertaining to railroad-highway grade crossings be disqualified from operating a CMV.

Status.—Final rule published on 09/02/99 (64 FR 48104).

Grade Crossing Signals (Inspection, Testing and Maintenance)

Summary.—FRA issued a final rule for inspection, testing and maintenance of automated warning devices 9/30/94, and the rule went into effect 1/1/95 (49 CFR Part 234). During the initial year, FRA worked with railroads and signal employees to disseminate information, conduct training, and identify any areas of ambiguity or weakness in the standards. At a technical resolution committee (TRC) meeting during the week of 3/13/95 that included participation by railroads, the Brotherhood of Railroad Signalmen, and States, several issues were identified that require clarification or refinement. An interim manual dated 4/14/95 incorporated the findings of the TRC.

Status.—Interim final rule amendments published 6/20/96 (61 FR 31802). FRA is preparing a notice to make the changes final which is expected to be published in the near future.

Locomotive Visibility /Auxiliary Alerting Lights

Summary.—In 1991, FRA initiated a new phase of research on locomotive conspicuity in relation to safety at highway-rail crossings. The Amtrak Authorization and Development Act of 1992 mandated that the research be completed and that a regulation be issued to apply alerting lights to locomotives.

Statutory deadline.—Final rule by 6/30/95.

Background.—FRA published a "grandfathering rule" on 2/3/93 and amendments on 5/13/94. After the research was substantially completed in early summer of 1995, FRA briefed the industry parties on the results, discussed options for regulatory action, and elicited additional information concerning railroads' progress in equipping their fleets. A Notice of Proposed Rulemaking was published on 8/25/95. The AAR and the ASLRA requested a technical conference to perfect the rule for final issuance, and that conference was held 11/28/95. Written comments were due by 12/12/95.

Status.—Final rule was published 3/6/96 (61 FR 31802). Equipping of locomotives used as lead units at speeds exceeding 20 mph was required to be completed by 12/31/97, as provided by law.

Private Highway-Rail Grade Crossings

Summary.—The Secretary's Action Plan for Grade Crossing Safety (6/94) commits FRA to conducting a special safety inquiry on private crossings.

Status.—Conducted workshop on possible guidelines 7/93; timing of further action to be determined.

Selection of Grade Crossing Automated Warning Devices

Summary.—FRA published a Notice of Proposed Rulemaking 3/2/95 (60 FR 11649) and received over 3,000 written comments through 6/14/95.

Status.—Termination notice published 8/8/97 (62 FR 42733).

Use of Locomotive Horns (Whistle Bans)

Summary.—The Swift Rail Development Act of 1994 required FRA to issue regulations providing for the use of train horns at highway-rail crossings.

Statutory deadline.—Final rule 11/2/96 (most hazardous crossings), 11/2/98 (other crossings).

Background.—This legislative mandate anticipated FRA follow up to Emergency Order No. 15, which addressed local whistle bans on the Florida East Coast Railroad between Jacksonville and Miami. FRA released a report on the national impacts of local whistle bans on 6/1/95 and has conducted an extensive program of public outreach to make communities aware of the forthcoming rulemaking and to seek information on supplementary safety measures that would support allowance of quiet zones in communities sensitive to train horn noise. Contacts have been made with 160+ jurisdictions known to have whistle bans in place. FRA representatives have met with or addressed forums of state and local officials and community groups. Met with AAR/BRS/AAHSTO/FHWA 12/13/95 to address technical specifications for 4-quadrant gates.

Numerous congressional offices encouraged FRA to continue outreach and data collection. FRA advised the Congress that the deadline for an initial final rule would not be met as a result. Immediately prior to adjournment, the 104th Congress enacted the FAA reauthorization bill (PL 104–264; 10/9/96), which included amendments to the original whistle ban legislation. In general, the legislation affirms the latitude available to the Secretary to provide for phase-in of regulations and focus on safety results.

Status.— NPRM published 1/13/00 (65 FR 2230) (Docket No. FRA–1999–6439, Notice No. 1). Written comments due 5/26/00. FRA is holding public hearings to receive oral comments.

HAZARDOUS MATERIALS

New Directions for Rail Hazardous Materials Safety

Summary.—FRA and RSPA have recently completed the two major pending rulemakings addressing hazardous materials tank car safety (crashworthiness and tank retests). With completion of these tasks, it is now possible to turn attention to recommendations of the Transportation Research Board regarding the tank car design and construction process. In order to further this work, FRA is joining with its public and private sector partners to define and prioritize short and long-range research programs, identify needs for rulemaking, and assist in development of improved industry standards.

Status.—A public workshop was conducted 2/13/96–2/14/96 in Houston, with participation by labor, railroads, tank car owners, and shippers. FRA is seeking means of advancing public/private partnerships for North American tank car safety.

Tank Car Crashworthiness and Retest

Summary.—Research and Special Program Administration Dockets HM–175A and HM–201 addressed further improvements in tank car crashworthiness, and adoption of advanced non-destructive testing to improve tank retest procedures, respectively.

Status.—Final rules published 9/21/95 (60 FR 49048).

Train Placement

Summary.—FRA is evaluating whether to recommend that the Research and Special Programs Administration publish proposed amendments to the in-train placement requirements for handling rail cars transporting hazardous materials. FRA is reviewing accident/incident data to determine whether the current non-hazardous materials buffer car requirements are still necessary and whether (as recommended by the National Transportation Safety Board) a buffer car should be required at the rear of each train.

Status.—FRA is studying the feasibility of a proposed amendment.

OTHER SAFETY PROJECTS AND PARTNERSHIP EFFORTS

Bridge Structural Safety

Summary.—Following a survey of bridge conditions and railroad inspection practices, FRA determined that regulatory action is not necessary, but that FRA should continue to exercise an oversight role regarding bridge structural safety programs. FRA issued an interim statement of policy 4/27/95, with comments due 6/26/95.

Status.—Comments support continued FRA partnership role. Final statement of policy is in review and clearance within the Executive Branch.

Note.—On 2/12/96, the Administrator issued Emergency Order No. 19, which removed from service a bridge on the Tonawanda Island Railroad in New York State pending necessary structural repairs (61 FR 628; 2/16/96).

Discolored Wheels

FRA has granted a master waiver of the Freight Car Safety Standards permitting continued use of discolored heat-treated, curved plate wheels, which have superior

resistance to thermal abuse. Data gathered under the waiver, together with results of analysis already provided, may support a permanent change in the regulation.

Environmental Impacts

FRA revised its Procedures for Considering Environmental Impacts to update or eliminate outdated references to programs or statutory authorities that no longer exist and to correct inconsistencies with the Council on Environmental Quality's National Environmental Policy Act implementing regulations. The revised procedures were published in the Federal Register on 5/26/99 (64 FR 28545).

Hours of Service Electronic Recordkeeping

Current hours of service record keeping uses paper and ink, but a major railroad has been given relief to keep electronic records. Other railroads have expressed interest, and similar waivers will involve similar issues. At FRA's invitation, the AAR submitted a petition seeking a master waiver for use of electronic record keeping. However, individual railroads have elected to proceed separately, and FRA is processing each on its merits. Permanent amendments to the recordkeeping and reporting requirements may be proposed. FRA is assisting railroads in developing electronic systems by providing guidance materials.

Remote Control Locomotives

Current regulations contemplate operation of a locomotive exclusively from within the cab, and provision for the safety of the operation is made within that context. FRA has previously proposed a test program to gather more data on various types of operations. FRA has also held an informal safety inquiry regarding use of one-person crews and remote control locomotives on the Wisconsin Central (see 61 FR 58736; 11/18/96). Further action expected.

Shared Use of General Railroad System—Joint Statement of Agency Policy

FRA and the Federal Transit Administration (FTA) have been working together to develop a policy concerning safety issues related to light rail transit operations on the general railroad system, how the two agencies intend to coordinate use of their respective safety authorities and the waiver process related to shared use operations. A proposed joint statement of policy was published 5/25/99 (64 FR 28238) with comments due on 7/30/99. Comment period extended on 7/28/99 to 10/29/99 (64 FR 40931). Additional extension on 10/28/99 to 1/14/00 (64 FR 58124) (FRA Docket No. FRA–1999–5685, Notice No. 3).

Shared Use of General Railroad System—FRA Jurisdiction Policy Statement

FRA issued a proposed statement of agency policy on 11/1/99 (64 FR 59046) (FRA Docket No. FRA–1999–5685, Notice No. 4) describing the extent of its statutory jurisdiction over railroad passenger operations (which covers all railroads except urban rapid transit systems not connected to the general railroads system) and to explain how it will exercise that jurisdiction. Comments are due by 1/14/00.

TOFC/COFC Securement

Summary.—Following a serious accident at Smithfield, N.C., on 5/16/94, FRA formed a partnership with major railroads and labor organizations to evaluate and improve securement of intermodal loads. A report to the Secretary dated 9/15/94 documented the initial results of that effort.

Status.—FRA held a meeting on 2/22/95 that focused on an item-by-item discussion of the status and progress made within the industry with respect to the seven recommendations identified in the report to the Secretary. The AAR has established an Intermodal Equipment Handling Task Force that has developed a number of training aids. A follow-up TOFC/COFC loading and securement safety survey was conducted during 1996. FRA conducted additional loading and securement field evaluations during July-August 1997. Joint training activity brought together railroads, TTX and FRA to maintain strong emphasis on compliance with AAR loading requirements. FRA continues to monitor securement of trailers and trucks in transportation and to work on this issue through SACP's on individual railroads.

Train Dispatcher Training

FRA submitted a report to the Congress on 1/5/95 regarding the functions of contemporary train dispatching offices. The report noted that traditional pools of candidates for recruitment of train dispatchers are no longer adequate to the need. In partnership with the American Train Dispatchers Department/BLE (ATDD), FRA identified the need for a model train dispatcher training program.

Experts from Amtrak, the ATDD, the Burlington Northern/Santa Fe Railroad and FRA developed a list of elements for dispatcher training programs. Required competencies and training program elements have been abstracted from this effort for

a model program. The RSAC was be briefed on this effort on 3/24/97, with participants in the training task force indicating reluctance to attempt a "one size fits all" regulatory approach. Development of curricula continues with FRA support. Initial products of this effort were presented by an FRA contractor.

Wisconsin Central R.R.; Informal Safety Inquiry

Summary.—FRA sought to gather information regarding plans by the railroad to expand use of one-person crews and remote control operations.

Status.—A notice of special safety inquiry was published 11/18/96 (61 FR 58736). A public hearing was held 12/4–12/5/96 in Appleton, Wisconsin. Written submissions were requested by 12/2/96. FRA entered into an agreement with the railroad providing for a moratorium on new single person crew and remote control operations, together with other undertakings related to compliance with FRA regulations. The railroad has completed its responsibilities under the agreement.

SAFETY ADVISORIES/DIRECTIVES/BULLETINS (FEDERAL REGISTER NOTICES)

Advisories

99–3—Securement of floor beam cross-members on RoadRailer trailers: Safety practices to prevent the highway tandem wheel on RoadRailer trailers from falling onto the rails on moving trains. Published 11/10/99 (64 FR 61377).

99–2—Not issued.

99–1—Lifting or jacking of railroad equipment: Safety practices related to lifting or jacking of railroad equipment in order to remove trucks or repair other components on a piece of railroad equipment which requires individuals to work beneath railroad equipment while it is raised. Published 6/16/99 (64 FR 32300).

98–3—Safe Use of Prescription and Over-the-Counter Drugs: Safety practices for the safe use of prescription and over-the-counter drugs by safety-sensitive railroad employees. Published 12/24/99 (63 FR 71334)

98–2—Emergency application of airbrakes: Safety practices to reduce the risk of casualties caused by failure to activate the available two-way end-of-train telemetry device (two-way EOT) to initiate an emergency brake application beginning at the rear of the train when circumstances require an emergency application of the train airbrakes. Published 6/5/98 (63 FR 30808).

98–1—Vision standards of certified locomotive engineers: Addresses the vision standards of certified locomotive engineers in order to reduce the risk of accidents arising from vision impaired engineers. Published 5/28/98 (63 FR 29297).

97–3—Authorization of train movements past stop indications of absolute signals: Safety practices to reduce the risk of accidents arising from conflicting train movements when train dispatchers and control operators authorize movements past a stop indication of an absolute signal. Published 9/18/97 (62 FR 49047).

97–2—Failure to property secure unattended rolling equipment: Safety practices to reduce the risk of casualties from runaway locomotives, cars, and trains caused by failure to properly secure unattended rolling equipment left on sidings or other tracks. Published 9/18/97 (62 FR 49046)

97–1—Protection of trains and personnel from hazards caused by severe weather conditions: Safety practices to reduce the risk of casualties from train derailments caused by damage to tracks, roadbed and bridges resulting from uncontrolled flows of water and similar weather-related phenomena. Note: This was amended on November 12, 1997, by revising the recommendations concerning the transmission of flash flood warning to train dispatchers or other employees controlling the movement of trains. Published 9/4/97 (62 FR 46794).

Directives

97–1—Review of operational tests and inspection programs and review of train dispatching procedures in non-signaled territory: Safety practices to evaluate the integrity of all railroads' programs of operational tests and inspections to ensure that safety-critical information is accurately conveyed and acknowledged for operations in non-signaled Direct Train Control (DTC) territory. Published 6/30/97 (62 FR 35331).

Bulletins

97–2—Initiating emergency application of train airbrakes descending heavy grades: Safety practice to prevent run-away trains on heavy grades of 2 percent or greater by initiating emergency application of airbrakes whenever train speed

exceeds maximum authorized speed by five miles or more. Published 2/27/97 (62 FR 9014).

97–1—Loss of dynamic braking due to unintentional activation of emergency MU fuel-line cut-off device: Safety practices for certain locomotives equipped with emergency MU fuel-line cut-off devices located inside the locomotive control compartment at a location which enables the cut-off device to be activated unintentionally. Published 1/30/97 (62 FR 4569).

FISCAL YEAR 1999 HAZMAT ACCIDENTS/INCIDENTS TRANSPORTATION

Question. Please chronicle all major hazmat-related accidents/incidents during calendar year 1999, noting date, location, railroad, type of hazmat, any fatalities, injuries, evacuations or other complications, and the estimated cost of damage and loss for each. Please also summarize the probable cause of each accident.

Answer. The following major hazmat-related accidents/incidents occurred during calendar year 1999 (January 1-December 31, 1999):

Date.—January 9, 1999
Location.—Milford, Nebraska
Railroad.—Burlington Northern Santa Fe
Type of hazmat.—Unknown
Fatalities/injuries.—None
Evacuations.—None
Other complications.—None
Estimated cost.—$885,000
Probable cause.—Turnout front (spring) worn or broken

Date.—January 21, 1999
Location.—Fort Plain, New York
Railroad.—Consolidated Rail Corporation
Type of hazmat.—Propane
Fatalities/injuries.—None
Evacuations.—150 people
Other complications.—None
Estimated cost.—$1,039,000
Probable cause.—Coupler or draft system failure

Date.—February 11, 1999
Location.—Woods Cross, Utah
Railroad.—Union Pacific Railroad
Type of hazmat.—Toluene
Fatalities/injuries.—None
Evacuations.—None
Other complications.—None
Estimated cost.—$140,000
Probable cause.—Wide gage due to worn rails

Date.—March 24, 1999
Location.—Wartrace, Tennessee
Railroad.—CSX Transportation
Type of hazmat.—Cartridges for weapons and incendiary ammunition
Fatalities/injuries.—None
Evacuations.—Unknown
Other complications.—None
Estimated cost.—$223,000
Probable cause.—Journal (roller) bearing failure

Date.—July 2, 1999
Location.—Hamlet, North Carolina
Railroad—CSX Transportation
Type of hazmat.—Methanol
Fatalities/injuries.—None
Evacuations.—None
Other complications.—None
Estimated cost.—$249,000
Probable cause.—Compound fissure (track failure)

Date.—July 10, 1999
Location.—Riverfront, Louisiana
Railroad.—Union Pacific
Type of hazmat: 2-ethyl hexanol

Fatalities/injuries: None
Evacuations: None
Other complications: None
Estimated cost: $11,300
Probable cause: By-passed couplers due to crew switching failure

Date: July 11, 1999
Location: Paradise, Montana
Railroad: Montana Rail Link
Type of hazmat: Asphalt
Fatalities/injuries: None
Evacuations: None
Other complications: None
Estimated cost: $1,442,000
Probable cause: Irregular track alignment (sun kink)

Date: July 24, 1999
Location: Katka, Idaho
Railroad: Burlington Northern Santa Fe
Type of hazmat: Anhydrous ammonia
Fatalities/injuries: None
Evacuations: None
Other complications: None
Estimated cost: $525,000
Probable cause: Journal (roller) bearing failure

Date: August 7, 1999
Location: Judd, Texas
Railroad: Union Pacific
Type of hazmat: Petroleum Distillate
Fatalities/injuries: None
Evacuations: None
Other complications: None
Estimated cost: $392,000
Probable cause: Irregular track alignment (sun kink)

Date: September, 30, 1999
Location: Jens/Drummond Station, Montana
Railroad: I & M Rail Link/Montana Rail Link
Type of hazmat: Denatured alcohol
Fatalities/injuries: None
Evacuations: None
Other complications: None
Estimated cost: $1,088,000
Probable cause: Equipment failure

Date: October 7, 1999
Location: Orpha, Wyoming
Railroad: Burlington Northern Santa Fe
Type of hazmat: Unknown
Fatalities/Injuries: None
Evacuations: None
Other complications: None
Estimated cost: $134,300
Probable cause: Track failure

Date: October 31, 1999
Location: Canyon, Alaska
Railroad: Alaska Railroad
Type of hazmat: Aviation, turbine engine
Fatalities/Injuries: None
Evacuations: None
Other complications: None
Estimated cost: $700,000
Probable cause: Improper train make-up

GRADE CROSSING FUNDING

Question. Please update the table found on pages 421–425 of Senate Hearing 106–221, which outlines on a project-by-project basis how fiscal year 1999 and 2000 monies for grade crossing efforts were spent, who the recipients of the funds were, and

what the expected results of these efforts are. Please add a column which delineates in a similar manner the funds requested in fiscal year 2001 (adding lines for new initiatives as necessary)?

Answer. See table below.

[In thousands of dollars]

Activity	Fiscal year		
	1999 obligated	2000 funding	2001 request
Research & Development	830	1,085	1,435
Next Generation High-Speed Rail	4,738	3,897	4,000
Safety & Operations	2,850	3,487	3,217
Total	8,418	8,469	8,652

Appropriation/Project	Fiscal year			Recipient	Expected results
	1999 Pobligated	2000 funding	2001 funding		
Freight Car Reflectorization	$6,260	$15,000	$15,000	Volpe Ctr	Freight cars will be more visible to drivers, helping them avoid striking the train. Report published.
Eval Wayside Horns Optimal Acoustic Warning	26,138	15,000	15,000	Volpe Ctr	Locomotive horns will be optimized for sound quality and effectiveness while reducing noise pollution in surrounding communities.
Driver Behavior Accident Causation Driver Education.	307,668	225,000 (Eq 50K) (HSR 175K)	250,000 (Eq 140K) (Trk 110K)	Volpe Ctr	To gain a better understanding of how drivers react to grade crossings and why accidents happen in order to educate drivers.
Compendium of Grade Crossing Findings	161,310	40,000	50,000	Volpe Ctr	Develop a compendium of findings from research conducted on grade crossings.
Train Detection	71,905	75,000	100,000	Assoc. of American Railroads	Examine causes for loss of contact between rail and wheels, resulting in intermittent operation of grade crossing warning device (gate bobble).
Illumination Guidelines	9,931	15,000	15,000	Volpe Ctr	The use of street lights to illuminate trains at night so drivers can see and avoid running into the train.
Photo Enforcement	6,521	50,000	50,000	Volpe Ctr	Assess the Ohio crossbuck and traffic signals at crossings to improve warning to drivers.
Obstacle/Intrusion Detection	38,489	75,000	75,000	Volpe Ctr	Building on the HSR Crossing Technology project, examine the obstruction detection systems suitable for use at grade crossings and expand for use along the right-of-way.
GIS support to HSR Corridors	10,044			Volpe Ctr	Develop GIS system to support communication between grade crossing signals and Positive Train Control systems.
Volpe Center		75,000 (Eq)	75,000 (Eq)	Volpe Ctr	Support for assessing hazard elimination projects
		50,000	50,000	Volpe Ctr	Expand Corridor Risk Analysis for high-speed corridors to additional corridors.
Support	14,963	(HSR)	(TRK)		
ITS Architecture & Support to ITS PO	24,706	25,000		ITS JPO	The ITS Architecture is gaining a new User Service—User Service #30—which describes how grade crossing will be incorporated into the overall Intelligent Transportation System and which will link train control systems with advanced highway traffic control systems. Standards development.
Passive & Private Crossings (new)			50,000	Volpe Ctr	Examine demonstrations at passive crossings and develop the groundwork for a more extensive future program involving other modes.

Appropriation/Project	Fiscal year			Recipient	Expected results
	1999 Pobligated	2000 funding	2001 funding		
Review Available Data Sources (new)	.....	.....	75,000	Volpe Ctr	Examine data elements and data bases to determine additional information that should be collected to analyze the causes of accidents at grade crossings.
National Warrants (new)	.....	.....	50,000	Volpe Ctr	Develop criteria or warrants for analyzing grade crossings and determining the types of warning devices that should be installed.
Criteria & overall evaluation methodology	.....	.....	125,000	Volpe Ctr	Determine criteria for developing an evaluation methodology usable for all grade crossing R&D projects.
Test Interoperability of VPAS Systems	.....	250,000 (TRK)	.....	Univ. of Alabama	To test the interoperability of vehicle proximity alert systems and examine potential for standards.
State-of-the art planning tools for crossing consolidation.	.....	.....	100,000	Volpe Ctr	To develop new cost/benefit planning tools for rationalizing the planning process to enable crossings to be closed and consolidated while making improvements to highways and transit systems.
Assess 1010 & 1036 Demos and NGHSR BAA	127,776	150,000 (HSR)	175,000 (TRK)	Volpe Ctr	Evaluate the technology demonstration projects funded under the Section 1010 & 1036 program in ISTEA (4-quad gate with obstruction detection in CT and Vehicle Arrestor Barrier in IL), and assess BAA submittals.
Standardized before/after evaluations	.....	.....	115,000	Volpe Ctr	Develop standardized before/after evaluation techniques to measure safety effectiveness of research projects.
Crossing Ranking Capability	.....	.....	25,000	Volpe Ctr	Building upon the risk assessment techniques for analyzing grade crossings, develop a user-friendly technique for evaluating and ranking grade crossings to improve allocation of funding resources.
HSR Crossing Tech	24,181	25,000 (HSR)	25,000 (TRK)	Volpe Ctr/Battelle Labs	To examine signaling and train control, obstruction detection and warning devices and barrier system technologies available for use in high-speed corridors. Develop methodology to evaluate improved safety provided by additional devices.
Subtotal Research & Development	829,892	1,085,000	1,435,000		
Mitigating Grade Crossing Hazards	1,370,000	1,500,000	1,500,000	BAA Awardees	BAA awards to date will include radar vehicle detection systems/computer video traffic recording systems.
ITS Architecture & Support to ITS PO	20,000	.....	.....	ITS JPO	The ITS Architecture is gaining a new User Service—User Service #30—which describes how grade crossing will be incorporated into the overall Intelligent Transportation System and which will link train control systems with advanced highway traffic control systems. Standards development.

TRB HSR IDEA Program	500,000	500,000	500,000	TRB	The TRB IDEA Program, supported by FRA, FHWA, NHTSA, and FTA, competitively solicits concepts, conducts peer review, and awards innovative technology projects nationwide to support development of High-Speed Rail and Intelligent Transportation Systems. Examples of completed projects include a very-wide field of view camera suitable for automated monitoring of grade crossings and a scanning radar antenna for surveillance systems.
TRB ITS IDEA Program	500,000	500,000	500,000	TRB	
Low Cost Innovative Technologies	1,100,000	947,000	1,050,000	BAA Awardees	Awards under the latest BAA program have not been announced.
Four Quadrant Gate Deployment Assessment (new)	.....	50,000	50,000	Volpe Ctr	Analyze the 4-quadrant gates deployed in Florida and North Carolina and develop standardized criteria for their use.
NC Sealed Corridor	1,000,000	400,000	400,000	NCDOT	The North Carolina Sealed Corridor Initiative will treat every crossing in the 174-mile Charlotte to Raleigh segment of the high-speed rail corridor with innovative crossing devices like median barriers, long gate arms, and 4-quad gates. Redundant crossings will be closed.
NY Locked Gate	25,000	.....	.....	NYSDOT	To design, fabricate, test and evaluate a low-cost grade crossing gate system suitable for low volume traffic crossings on high-speed corridors.
Volpe Center Support	223,301	.....	.....	Volpe Ctr	Support of assessing hazard elimination projects. Corridor Risk Analysis for Empire Corridor.
Subtotal next generation high-speed rail	4,738,301	3,897,000	4,000,000		
Operation Lifesaver	600,000	950,000	([1])	Operation Lifesaver, Inc.	Public education about the laws regarding grade crossings and trespassing, the dangers at grade crossings and on rail rights-of-way and the importance to obey traffic and trespass laws.
Public Awareness and Outreach	33,700	37,000	50,000	Various printing contractors, packing and shipping firms, equipment rental firms, conference organizers, OL suppliers, etc..	Promotional and audio-visual materials, conference registrations and display booth space and supplies. Materials are used or distributed when making presentations to schools, community groups, workshops, conventions, etc.
Police Officer Detail	114,444	165,000	165,000	Erie County, NY Selection of regional officers is pending.	The police officer detail is an outreach program with the law enforcement community to raise awareness of crossing safety and trespass prevention. One officer is detailed full time to Washington, and one each will be detailed part-time to four FRA regions.
Outreach to Law Enforcement and Trespass Prevention.	51,700	50,000	50,000	IACP, NSA, NFOP, etc. for conference display booth space, registration fees, and GPO printing for pamphlets, brochures, and for other promotional items.	Outreach to judges, prosecutors and law enforcement to enhance their knowledge of crossing safety and trespass prevention issues, and materials to support FRA's regional manager promotions of highway-rail crossing safety and trespass prevention programs.
Analysis of High-Profile Crossings	14,600	15,000	15,000	Univ of West Virginia and local survey firms.	Research and analysis of problems associated with and alternatives for, high-profile crossings and low-clearance vehicles.

Appropriation/Project	Fiscal year			Recipient	Expected results
	1999 Pobligated	2000 funding	2001 funding		
Airborne survey of crossing elevations	289,000	85,000	100,000	US Army Corp of Engineers	For airborne measurement of ground elevation and collection of data to be used in analysis of high-profile crossings on high exposure rail corridors.
Highway-Rail Crossing Inventory & Data Bases	50,000	80,000	50,000	AMB	Simplify and refine the Highway-Rail Crossing Inventory and collision data bases reporting and report production and accident prediction procedures.
Information Processing	285,000	285,000	296,400	AMB	Supports Highway-Rail Crossing Inventory and crossing module of the Accident/Incident Report Processing.
Develop new outreach campaign	.....	.....	500,000	To be determined	Creative phase of new public awareness campaign development with focus primarily on trespass prevention, secondarily on crossing safety.
Regulatory Support	25,000	.....	.....	Auburn University	Conduct literature search of warrants, guidelines and best-practices for determining appropriate warning device(s) or grade separation for highway-rail crossings.
Regulatory Support	38,000	40,000	40,000	DeLeuw Cather	Assistance in preparation of EIS for train horn NPRM.
Rail-with-Trails	50,000	10,000	10,000	Reimbursable agreement with FHWA to fund development of best-practices for rails-with-trails, contractor not yet selected.	Best-practices for design and operation of rails-with-trails projects.
PC&B (Approximate)	1,298,492	1,770,000	1,941,000		Supports staff dedicated to the crossing and trespasser program.
Subtotal Safety & Operations	2,849,936	3,487,000	3,217,400		
Total FRA	8,418,129	8,469,000	8,652,400		

[1] $600,000—Funded under Maglev funds.

TOP TEN STATES WITH MOST GRADE CROSSING ACCIDENTS

Question. Please list the "top ten" states that have the highest number of highway-rail crossing accidents and fatalities, for calendar years 1997, 1998 and 1999.

Answer. See the table below.

State [1]	Collisions			Deaths		
	1997	1998	1999 [2]	1997	1998	1999 [2]
Texas	421	320	364	54	45	41
Illinois	213	198	198	27	30	53
Indiana	227	195	191	23	25	26
California	159	187	190	22	32	24
Louisiana	203	214	176	30	25	20
Ohio	178	154	144	26	15	21
Georgia	138	140	134	12	13	7
Mississippi	148	133	131	19	24	17
Alabama	135	146	122	19	11	12
Michigan	152	104	114	14	11	14
Wisconsin	117	105	110	6	7	7

[1] Ranking is based on total number of reported collisions at highway-rail crossings, both public and private during 1997–1999.

[2] 1999 data is preliminary.

IG AND NTSB REPORTS ON GRADE CROSSING

Question. Please discuss FRA's response to the recent Inspector General and NTSB reports regarding grade crossing safety and how this response is reflected in the fiscal year 2001 budget request.

Answer. The Office of Inspector's General report on the Department's Rail-Highway Crossing Safety Action Plan included five specific recommendations. These recommendation are: implement cost-effective strategies to reduce highway-rail grade crossing collisions, develop a trespass prevention action plan, incorporate rail transit crossing and trespassing incidents into the Action Plan's statistics, periodically reconcile FRA's crossing collision database with the National Response Center's rail accident reports, and update the grade crossing inventory by states and railroads.

In 1998, the National Transportation Safety Board (NTSB) published Safety at Passive Grade Crossings (NTSB/SS–98–02). One of the recommendations (H–98–028) to the Department of Transportation in the report was the installation of STOP signs at all passive crossings unless an engineering study found otherwise. While recognizing the importance of STOP signs under many circumstances, the Department responded to the NTSB with the recommendation that a system of guidelines (or warrants) be created to provide guidance for the selection of the appropriate safety treatment for all types of crossings. Treatments would range from standard crossbucks to including crossing closures and grade separations. The Board has classified the Department's response as "Open-Acceptable."

FRA addresses the recommendations of the OIG as follows. FRA has been actively promoting the use of traffic channelization, photo enforcement and stricter penalties for crossing violations for a number of years. Both traffic channelization and photo enforcement are included in the proposed train horn rule, and FRA is developing a model photo enforcement legislative package to help interested states implement legislation. A specific trespass prevention action plan is currently being developed within FRA and will be in place by May 1, 2000. FRA and FTA are working together to ensure that transit rail data is available for Action Plan statistics. Ways to reconcile the different reporting formats and requirements between transit agencies and conventional railroads are being explored as well. FRA has already begun the process of reconciling its database with the information in the National Response Center's rail accident reports. FRA has committed to reconciling the two databases on a quarterly basis. FRA has proposed in its re-authorization legislation that the states and railroads be required to update the crossing inventory database. FRA and FTA are exploring methods to provide a complete and accurate database of the nation's crossings.

To address the recommendation of NTSB, a ONEDOT Working Group has been formed. Chaired by the Office of the Assistant Secretary for Transportation Policy Development, the Working Group includes representatives from the FRA, FHWA, NHTSA, FTA, and the ITS Joint Program Office. The Working Group has developed

a comprehensive project plan for guidance to state and local traffic engineers regarding highway/rail grade crossing traffic control devices and grade separation. The Office of Secretary of Transportation (OST) has approved the formation of a technical working group (TWG) to develop the guidelines. The TWG includes representatives from the Department, NTSB, state and local highway authorities, rail labor and management, and other interested parties. A literature review funded by FRA has been completed by Auburn University in Alabama. The review documents existing guidelines, warrants, or best practices in use by recognized organizations. There have been two meetings of the TWG and a final meeting is scheduled in June 2000. A draft document containing the guidelines will be provided by October 2000.

STATUS OF MODEL STATE LAWS PROMOTING GRADE CROSSING

Question. What progress have you made on developing model state laws to promote grade crossing safety? How much is being allocated for this activity in fiscal year 2000? How much is requested in fiscal year 2001?

Answer. FRA has drafted a model state bill defining various grade crossing safety violations, setting penalties for each violation, and a model state bill regarding photographic enforcement of grade crossing safety laws. The documents are being reviewed within FRA. No specific funds are dedicated to this project in fiscal year 2000–2001.

IMPACT OF ACTION PLAN ON GRADE CROSSING CHALLENGES

Question. Is it time for the Department to prepare an updated action plan to promote grade crossing safety? How might such a plan help manage and expedite the DOT approach to grade crossing challenges? Is a separate plan needed to address trespasser challenges?

Answer. DOT's Intermodal Highway-Rail Grade Crossing Team has plans to revise the 1994 Rail-Highway Crossing Safety Action Plan. The Team will complete the revision this fiscal year. The "new action plan" can be expected to help expedite the DOT approach to the following grade crossing challenges: development of strategic outreach efforts (as contemplated by the FRA budget item for outreach), expanding partnerships to include work with Metropolitan Planning Organizations (these will help combat the proliferation of grade crossings with the coming of new/expanded transit operations that result from shared use of railroad rights-of-way for light rail/freight operations), continued/expanded Intelligent Transportation System applications for grade crossing safety, and focus on new technology. Trespass challenges will be addressed in a separate plan. While some of the methods of addressing trespass abatement are similar to crossing safety, i.e., education, enforcement, and engineering, they are not the same. Different targeting methodologies and strategies need to be developed for delivering the message about trespass prevention.

TRESPASS PREVENTION

Question. Please update the response to last year's question regarding trespass prevention found on pages 426–427 of Senate Hearing 106–221. What ongoing and new initiatives were undertaken in fiscal years 1999 and 2000? What initiatives are planned in fiscal year 2001? Are there specific funding requests in the budget associated with these ongoing or new trespass prevention initiatives?

Answer. In fiscal year 1999, FRA and Transport Canada developed pilot projects to test the effectiveness of the jointly-produced Community Trespassing Prevention Guide in Oshawa, Ontario, and Whistler, British Columbia. Both projects were very successful, with anticipated implementation of the Oshawa project by surrounding cities. A report on this project was presented at the April 2000 meeting of the American Public Transit Association. The Whistler project, which involved the British Columbia Railroad working with the community to build walkways and paths away from the tracks, was so successful that the Canadian National and Canadian Pacific Railroad will try to implement it system-wide. In addition, a Salem, Oregon, project using the new OLI trespass prevention presentation is ongoing.

In order to reduce potential trespass problems associated with recreational trails on or adjacent to active rail rights-of-way, FRA has led a ONE DOT effort to produce a Rails-with-Trails (RWT) Best Practices Report. Requests for proposals were received late spring 1999 and a 30-month contract was awarded in August to produce the report. The study has three sections: Literature Review, State-of-the-Practice Review, and Best Practices Report. To date, the Literature Review is nearly complete, and the State-of-the-Practice Review is underway. The final report is anticipated in late 2001, following review for comment by the identified stakeholders: local, State, and Federal government agencies; railroad management, labor, and advocacy groups; and trail proponents, planners, engineers, and advocacy groups.

One of the major problems facing FRA is the lack of demographic data regarding the individuals who trespass. This data is needed to focus outreach campaigns to specific "at-risk" groups. To address this problem, FRA has ongoing partnership efforts with Operation Lifesaver, Inc. (OLI), and the railroad industry to obtain better demographic information on railroad trespassers. In May 2000, FRA will meet with OLI and the railroad industry to finalize what demographic information will be collected. After the data is collected from arrest/eviction/contact reports currently recorded by railroad special agents, the information will be processed using demographic descriptor software to obtain "profiles" of railroad trespassers. This information will enable outreach efforts to reach the targeted groups.

Another major FRA initiative is to make law enforcement and judicial communities aware of the trespass problem. FRA has begun to supplement its full-time law enforcement liaison officer in Headquarters with part-time regional law enforcement liaison officers in its eight regions. These officers will work five days each month to reach out to local law enforcement agencies and judges with messages about the dangers of trespassing on railroad property. In addition, FRA continues to encourage states to pass railroad-specific trespassing laws using the model legislation developed by FRA. Another effort for more effective enforcement of trespassing laws in known high-trespass areas is the use of remote video monitoring. FRA will sponsor a demonstration project in Pittsford, New York, where video cameras and video imaging computer software will be used to capture trespassing activity. An alarm and live video image will be sent to a local dispatch center for appropriate law enforcement response. FRA expects this project to start in the spring of 2000 and to continue for one year.

Funding for FRA's trespass prevention efforts are included under FRA's highway-rail grade crossing safety and trespass prevention program. For fiscal year 2001, FRA is requesting $500,000 for an outreach program that will help reduce highway-rail grade crossing collisions and trespass casualties. The proposed cost-effective outreach program will educate communities and highway users of the dangers that exist on railroad property and at highway-rail crossings. Fiscal year 2000–2001 funds will continue to support Police Officer Details and Outreach to Judges. These efforts will contribute significantly to the trespass prevention programs. In addition, FRA is providing about 48 percent of the funding for the contract for the RWT Best Practices Report, with the Federal Highway Administration funding 47 percent and the National Highway Traffic Safety and Federal Transit Administration contributing 5 percent. Finally, OLI will use a portion of FRA's annual grant to support trespass prevention efforts.

TRESPASS DEMOGRAPHIC INFORMATION

Question. It has been agreed that better demographic information regarding who trespasses and where would be helpful in targeting educational efforts to reduce trespassing incidents. Please update the Committee on the trespass prevention demographic information gathering process. What resources is FRA dedicating to this research? What is its status?

Answer. One of the major problems facing FRA is the lack of demographic data regarding the individuals who trespass. This data is needed to focus outreach campaigns to specific "at-risk" groups. To address this problem, FRA has ongoing partnership efforts with Operation Lifesaver, Inc. (OLI), and the railroad industry to obtain better demographic information on railroad trespassers. In May 2000, FRA will meet with OLI and the railroad industry to finalize what demographic information will be collected. After the data is collected from arrest/eviction/contact reports currently recorded by railroad special agents, the information will be processed using demographic descriptor software to obtain "profiles" of railroad trespassers. This information will enable outreach efforts to reach the targeted groups.

FISCAL YEAR 1997–2001 SECTION 130 FUNDS

Question. Please confer with the Federal Highway Administration, and report on available section 130 surface transportation program safety funds, on a state-by-state basis, for fiscal years 1997 through 2001. Please indicate unobligated balances for each state's total available section 130 funds.

Answer. The attached table shows the amount of funds available for Section 130 programs for the fiscal years 1997 through 2000 on a state-by-state basis. The funds available for fiscal year 2001 will not be calculated until later this year. It is not expected that there will be any major changes in the way funds are allocated to states. The unobligated balance under TEA–21 includes fiscal year 2000 funds.

SURFACE TRANSPORTATION PROGRAM SAFETY SET-ASIDE FUNDS, HIGHWAY-RAIL CROSSINGS (23 U.S.C. 130, YEARLY APPROPRIATIONS AND UNOBLIGATED FUNDS AS OF 2/29/2000)

State	Fiscal year				ISTEA funds	TEA–21 funds
	1997 approp	1998 approp.	1999 approp.	2000 approp.		
Alabama	$3,220,384	$3,220,384	$3,220,384	$3,220,384	$435,408.99	$6,608,920.00
Alaska	2,439,186	2,439,186	2,439,186	2,439,186	.....	6,265,503.00
Arizona	1,576,081	1,576,081	1,576,081	1,576,081	1,470,930.44	4,728,243.00
Arkansas	2,457,429	2,457,429	2,457,429	2,457,429	584,602.00	4,280,137.00
California	10,182,716	10,182,716	10,182,716	10,182,716	437,192.65	5,713,426.16
Colorado	2,202,728	2,202,728	2,202,728	2,202,728	631,402.47	3,895,433.84
Connecticut	1,047,610	1,047,610	1,047,610	1,047,610	121,641.22	1,042,555.00
Delaware	504,776	504,776	504,776	504,776	364,869.79	835,717.20
District of Columbia	210,728	210,728	210,728	210,728	421,456.00	632,184.00
Florida	4,686,707	4,686,707	4,686,707	4,686,707	1,572,750.00	6,519,470.00
Georgia	4,696,264	4,696,264	4,696,264	4,696,264	3,897,484.93	10,082,116.71
Hawaii	391,793	391,793	391,793	391,793	.....	1,175,379.00
Idaho	1,429,320	1,429,320	1,429,320	1,429,320	0.25	2,358,256.00
Illinois	7,926,261	7,926,261	7,926,261	7,926,261	584,973.93	13,359,926.00
Indiana	4,962,375	4,962,375	4,962,375	4,962,375	105,939.98	7,192,472.14
Iowa	3,795,673	3,795,673	3,795,673	3,795,673	129,344.28	2,742,497.10
Kansas	3,286,936	4,870,650	4,870,650	4,870,650	84,378.92	1,945,620.00
Kentucky	2,535,034	2,535,034	2,535,034	2,535,034	650,319.52	7,051,062.00
Louisiana	3,176,113	3,176,113	3,176,113	3,176,113	453,959.42	1,862,618.41
Maine	938,057	938,057	938,057	938,057	827,384.48	2,699,571.00
Maryland	1,427,286	1,427,286	1,427,286	1,427,286	1,024,927.00	4,228,983.00
Massachusetts	2,011,267	2,011,267	2,011,267	2,011,267	153,571.00	6,647,022.00
Michigan	5,352,187	5,352,187	5,352,187	5,352,187	1,504,804.00	9,128,676.46
Minnesota	4,041,936	4,041,936	4,041,936	4,041,936	150,021.45	4,880,649.00
Mississippi	2,240,007	2,240,007	2,240,007	2,240,007	71,121.00	94,081.00
Missouri	3,998,022	3,998,022	3,998,022	3,998,022	91,000.00	449,048.11
Montana	1,613,367	1,613,367	1,613,367	1,613,367	120,161.23	3,491,197.00
Nebraska	2,661,323	2,661,323	2,661,323	2,661,323	1,234,915.21	3,775,169.00
Nevada	783,990	783,990	783,990	783,990	60,388.00	921,733.00

New Hampshire	612,960	612,960	612,960	612,960	101,005.43	699,759.83
New Jersey	2,691,259	2,691,259	2,691,259	2,691,259	287,187.38	4,946,367.00
New Mexico	1,205,846	1,205,846	1,205,846	1,205,846	1,457.61	2,460,353.72
New York	6,020,444	6,020,444	6,020,444	6,020,444	197,141.00	6,333,322.00
North Carolina	3,981,325	3,981,325	3,981,325	3,981,325	319,856.00	9,650,525.00
North Dakota	2,809,183	2,242,521	2,646,743	2,809,183	299,675.37	3,179,601.04
Ohio	6,301,744	6,301,744	6,301,744	6,301,744	.....	2,863,477.82
Oklahoma	3,300,832	3,300,832	3,300,832	3,300,832	4,395.63	3,325,266.00
Oregon	2,194,099	2,194,099	2,194,099	2,194,099	639,030.96	6,582,297.00
Pennsylvania	5,117,791	5,804,391	5,804,391	5,804,391	348,802.57	5,081,603.91
Rhode Island	445,013	445,013	445,013	445,013	248,626.89	1,159,804.00
South Carolina	2,584,926	2,584,926	2,584,926	2,584,926	205,139.58	2,749,828.83
South Dakota	1,654,832	1,654,832	1,654,832	1,654,832	65,555.08	3,873,795.00
Tennessee	3,267,384	3,267,384	3,267,384	3,267,384	386,320.82	2,911,250.53
Texas	10,906,280	10,906,280	10,906,280	10,906,280	163,840.00	11,901,540.00
Utah	1,152,999	1,152,999	1,152,999	1,152,999	118,977.41	409,172.31
Vermont	618,632	618,631	618,632	618,632	1,927,777.25	1,855,893.00
Virginia	2,731,204	2,731,204	2,731,204	2,731,204	2,663,197.38	4,966,853.00
Washington	2,717,360	2,717,360	2,717,360	2,717,360	1,856,426.98	3,818.151.20
West Virginia	1,708,309	1,708,309	1,708,309	1,708,309	412,885.00	1,932,078.00
Wisconsin	3,929,021	3,929,021	3,929,021	3,929,021	1,295,134.45	3,997,800.56
Wyoming	912,318	912,318	912,318	912,318	93,671.00	1,011,191.00
Puerto Rico	740,370	.....	.....	.....	.....	.....
Totals	153,399,687	154,362,968	154,767,191	154,929,631	28,821,051.95	10,317,596.88

1–800 EMERGENCY NOTIFICATION SYSTEM

Question. Section 301 of the 1994 Railroad Safety Act requires the Secretary to conduct a pilot program to demonstrate an emergency notification system using a toll-free telephone number for the public to report any malfunctions or other safety problems at railroad-highway grade crossings. Please bring us up to date on FRA's response to this requirement. How is FRA promoting railroad investment in this area and how does the FY–2001 budget contribute towards this goal?

Answer. The 1994 Swift Rail Development Act directs the Secretary to demonstrate a toll-free emergency notification system to report emergencies, malfunctions, and other safety problems, and to conduct a pilot program in two states. However, the Congress did not appropriate funds for this program. In 1995, a preliminary design concept and implementation plan was completed and preliminary discussions were held with the States of Illinois and Minnesota for a two-State pilot test project. FRA's goal was to involve two States representative of both urban and rural areas.

In 1996, $625,000 was appropriated by Congress for the development of system hardware and software. No funds were appropriated for the installation of signs at crossings, the public education and awareness program, nor the final Report to Congress. FRA has reached an agreement with FHWA to use Surface Transportation Program Funds from the safety set-aside (Section 130) for the required signage part of this project. Meanwhile in 1996, several major railroads, at their own expense, started to install their own 1–800 Emergency Telephone Number signs at crossings to report malfunctions and/or emergencies. Some railroads are installing these at all of their public and private crossings, while others are installing them at only the public crossings, and yet others at only the active crossings (those with gates and/or flashing lights). Preliminary discussions were held with Union Pacific (UPRR) and Norfolk-Southern (NS) Railroads to evaluate methods for incorporating the railroads' 1–800 Number Systems into the overall system planned for the two pilot states.

In 1997, the FRA Administrator sent a letter to all States inviting them to participate in the two-State pilot test program. FRA received expressions of interest from only four states, California, Illinois, New Mexico, and Minnesota.

In 1998, FRA awarded a 3-year contract to design, develop, and test a 1–800 Toll-Free Emergency Notification System (ENS), capable of reporting problems at highway-rail intersections to a centralized state police emergency response communication center or railroad train dispatch center. This 1–800 ENS will be designed for, and first tested in, the State of Texas where emergency response communication center personnel are familiar and knowledgeable with how such a system should properly operate. This will also upgrade that State's currently installed system. Subsequently, the 1–800 ENS Software Package will be made available to two or more pilot States. The software package will then be modified to operate from a railroad's perspective and offered to and installed on a medium size (or larger) railroad. In October 1999, FRA delivered and installed a prototype version of the 1–800 ENS Software Package at the State of Texas Department of Public Safety (DPS), Division of Emergency Management (DEM). The State DEM has been using this software successfully to record incoming calls at the rate of about 1,000 calls per month, preferring it to their former system. The final refinements are being completed and it is anticipated that the final software package will be delivered to the State by the end of April 2000.

FRA has conducted a poll of the major railroads and found that, after completion of the Conrail merger, more than 55 percent of all public at-grade crossings will contain a posted 1–800 ENS Number, and an additional 10 percent are on railroads where an emergency telephone number has been provided to local emergency service organizations (police, fire, medical, etc.). Of the 158,784 public at-grade crossings nationwide, a 1–800 ENS Sign has been installed at approximately 84,357 (53 percent) of the public at-grade crossings on the Burlington Northern Santa Fe (BNSF), UPRR, NS, CSX Transportation and IC Railroads. This represents 78 percent of all the active crossings (those with flashing lights and/or gates) in the nation.

Since Texas and Connecticut have state-wide systems which include some of the above crossings, FRA estimates about 56 percent of all public at-grade crossings in the nation will soon be equipped. Some railroads, for example, UPRR, NS and BNSF, are voluntarily considering an expansion of their programs to include additional crossings (1) not currently equipped with automatic warning devices and (2) private crossings.

An effective emergency notification system will have a centralized manned center to receive calls. This requires a telephone system for receiving calls and a computerized system (software and hardware) for fast, efficient, and accurate identification

of the crossing location on a highway-railroad grid. The 1–800 ENS Software Package will have the ability for logging calls and accessing Inventory Files based on the U.S. DOT/AAR National Highway-Rail Grade Crossing Number and Inventory. It will also have supplemental files, incorporate a display on a map, and the capability to forward the incoming call and information to the appropriate railroad or highway authorities.

FRA is evaluating the possibility of having the railroads assume responsibility for incoming 1–800 ENS calls since they are already moving in that direction. Using this approach, FRA believes that it may be possible to implement a 1–800 ENS on a national scale rather than in just two pilot states, thereby achieving more coverage with the appropriated funds.

FRA is currently focusing on railroad-centered programs. With the developed ENS software for the State of Texas almost completed, FRA plans to modify the software for use by other state and railroad centered systems to support emergency management personnel in receiving calls by logging the problem being reported, accessing inventory files and assisting in forwarding the incoming calls to the correct control center. The 1–800 ENS Software Package will have the ability for logging calls and accessing Inventory Files for quick crossing look-up based on the U.S. DOT/AAR National Highway-Rail Crossing Inventory Number. It will also have supplemental files, incorporate a GIS capability (display on a map) and forwarding the incoming call and information to the appropriate railroad and highway authorities to correct the situation. FRA also plans to encourage railroads and States with 1–800 systems to keep their Inventory up-to-date (a key component of a 1–800 system is to correctly identify the crossing number posted on-site).

Since the original funds appropriated by Congress appear to be sufficient to develop the software packages for both state and railroad oriented systems, no additional funding was requested by FRA in the fiscal year 2001 budget.

FUNDING FOR 1–800 EMERGENCY NOTIFICATION SYSTEM

Question. Have you already used the money appropriated several years ago for this purpose? Are any of these funds still available?

Answer. Of the $625,000 appropriated, $618,000 has been obligated for the development of the necessary software package to operate a state system, and for the conversion of this package to a railroad oriented system by regional and shortline railroads. The remaining balance of $7,000 may be used for computer hardware for a demonstration with a regional or shortline railroad.

ADDITIONAL FUNDS FOR 1–800 EMERGENCY NOTIFICATION SYSTEM

Question. Are seed monies necessary to advance regional emergency call centers to assist small railroads which have not invested in toll-free emergency systems? How much would be required for this effort? What are the expected benefits and costs? Does your fiscal year 2001 budget provide such funds?

Answer. In January 2000, FRA received a presentation for a proposed National Transportation Emergency Call Center (NTECC) which would establish a 24-hour 1–800 number emergency notification system center for all shortline and even medium-sized railroads patterned from the system used by BNSF. While the concept is in its infancy, the proposed center would provide national coverage for the medium (regional) and shortline railroads at a lower cost if each railroad established this service themselves. This concept is in the process of being developed and several railroads are being approached with the concept. It is estimated that approximately $350,000 may be needed to help establish such national and regional centers and possibly $150,000 per year to initially keep operational until they can be self-sufficient through payments from participating railroads.

FRA is evaluating the feasibility of providing seed funding or cost sharing for a national or one or more regional contract arrangements whereby smaller railroads (shortlines) could use the services of a national/regional Emergency Notification & Command Center to receive and respond to calls, and/or encourage American Shortline and Regional Railroad Association participation in establishing a national/regional emergency notification contract services.

In addition, FRA has established a partnership with the State of Pennsylvania, a group of eight shortline railroads within the State, and a County Emergency Management Authority (EMA) to create an emergency and problem notification system for the eight shortline railroads. The State of Pennsylvania is very supportive and desirous of expanding the system state-wide after the original establishment. FRA will supply the 1–800 Emergency Notification System software developed for the State of Texas (after modifications to make it applicable for railroad use) and possibly computer hardware. The State can provide funding for installation of the signs

(Sec. 130 money) and it is anticipated that FRA would provide some seed money to help establish the demonstration and center. The involved railroads are currently preparing a plan for the establishment and operation of the proposed center, determining the cost elements, and identifying the funding needed. If successful, FRA will meet Congress' mandate for implementing a 1–800 number program in two pilot States. This will also initiate the effort to implement this program for crossings that do not belong to the Class 1 railroads.

No funds have been included in the fiscal year 2001 budget for regional emergency call centers.

FISCAL YEAR 2000 AND FISCAL YEAR 2001 R&D PROJECTS

Question. Please reproduce the research and development project breakout table on page 75 of the budget justification. After each subaccount (e.g. "Train Occupant Protection"), list each research project in that category, and delineate the fiscal year 2000 enacted, current services level, new/expanded funding, and total fiscal year 2001 request for each project.

Answer.

[Dollars in thousands]

Program activity/project	Fiscal year	
	2000 enacted	2001 request
EQUIPMENT, OPERATIONS, & HAZMAT		
Train Occupant Protection:		
Locomotive Safety	1,800	2,950
Develop model to evaluate, test, and validate locomotive crashworthiness features for oblique and raking collisions; conduct full-scale tests to validate; models; analyze fuel tanks; conduct laboratory and full-scale testing of upgraded locomotive nose configuration.		
Passenger Rail Car Safety/Performance	1,800	2,400
Test passenger rail car crashworthiness features; conduct full-scale testing of multi-car models; assess safety performance of lightweight commuter rail vehicles.		
Rolling Stock Safety Assurance & Performance:		
On-Board Monitoring Systems	480	480
Evaluate brake system safety; evaluate on-board monitoring system via ECP brake lines; evaluate train-health monitoring; develop additional sensors for on-board application.		
Wayside Monitoring Systems	532	532
Evaluate NDE techniques for wheels; evaluate improved wayside inspection/detection methods for bearings and suspension components; evaluate prototype wayside inspection station.		
Material & Design Improvements	275	275
Evaluate advanced braking subsystems, including a fully automatic coupler and cushioning devices.		
Human Factors:		
Train Operations	2,178	3,028
Evaluate napping strategies and vigilance monitoring techniques for locomotive engineers; evaluate new technologies for information management in regular and high-speed operations; evaluate the use of digital communications in high-speed operations; evaluate post-accident stress in locomotive engineers; study teaming of operating personnel; initiate research on the application of behavior-based safety to the railroad environment; evaluate high-speed rail simulator.		
Yard & Terminal	550	550
Evaluate yard and terminal accidents to reduce injuries to railroad operating personnel, including maintenance-of-way workers and ergonomic issues.		

[Dollars in thousands]

Program activity/project	Fiscal year	
	2000 enacted	2001 request
Hazardous Materials Transportation:		
Hazmat Transportation Safety	400	600
Evaluate low temperature impacts on tank cars; evaluate the tank car service environment, including accident forces; study tank car reliability engineering.		
Damage Assessment & Inspection	300	300
Evaluate new non-destructive techniques for inspecting tank car welds and the tank car shell for cracks and flaws; evaluate techniques to replace the periodic hydrostatic test; evaluate tank car fatigue and critical flaw size; develop and evaluate overload impact sensors.		
Tank Car Safety	300	300
Evaluate new tank car steels; evaluate proposed 286,000GRL tank car designs.		
Grade Crossings Human Factors: Grade Crossings	435	835
Evaluate optimal acoustic warning systems; evaluate driver behavior at highway-rail grade crossings for freight, commuter rail and high-speed operations; analyze accident causes; evaluate innovative grade crossing warning devices.		
Montana University Project: Real Time Diagnostic Monitoring	250	.....
Development of a Locomotive Health Monitoring System to determine the operating condition of the locomotive and to provide the information to maintenance professionals via a remote communications link.		
Subtotal, Equipment, Operations & Hazmat	9,300	12,250
TRACK & VEHICLE TRACK INTERACTION		
Track & Components Safety:		
Material & Rail Inspection	1,600	1,850
Prevent and improve the detection of material and structural defects in track and its components; develop new methods for reducing occurrence of fatigue cracks and other failure modes in rail and for improving inspection and monitoring protocols; assess the safety of new track materials and components; develop technologies for detecting track hazards such as broken, misaligned, obstructed, or weakened rails ahead of a moving train.		
Track Strength	1,900	1,900
Deploy FRA track-testing vehicle to assess performance-based method of inspecting track gage strength along mainline and shortline railroads; develop risk-assessment methods to prevent lateral buckling of track due to thermal and vehicle-induced stresses; develop and demonstrate methods for the detection and prevention of weak vertical track support.		
Bridge Safety	250	400
Develop non-destructive evaluation techniques for safety inspection of steel and timber railroad bridges; investigate the use of composite materials in railroad bridge repair.		
Track—Train Interaction Safety:		
Track Geometry	700	700
Assess vehicle performance safety due to anomalies in track geometry and overall track geometry degradation; assess vehicle/track interaction safety due to commutative track panel shift.		
Wheel/Rail Interaction	800	800

[Dollars in thousands]

Program activity/project	Fiscal year	
	2000 enacted	2001 request
Assess vehicle/track interaction safety due to variations in wheel to rail forces, wheel/rail profile and contact conditions, as well as wheel climb and other related derailment modes.		
Special Trackwork	500	500
Assess vehicle/track interaction safety in turnouts and other special trackwork; examine safety performance of flange bearing frogs; foster the development of field retrofits to reduce high forces generated in turnouts.		
Electrification Safety	100	100
Foster the development of a prototype non-destructive inspection systems for catenary wire and third rail installations.		
Interaction under Heavy Axle Loads	300	300
Assess vehicle/track interaction under heavy axle loads.		
Vehicle/Track Interaction Safety Standards	500	650
Provide research and other technical services for the development and implementation of performance-based vehicle/track interaction, track geometry, and track strength safety standards.		
Grade Crossings—Infrastructure:		
Grade Crossings, Infrastructure	.....	600
Develop methods to mitigate potential safety failures in commonly used signal systems; investigate alternate technologies for train presence detection.		
Train Control:		
Advanced Train Control	464	500
Foster the development and implementation of advanced but cost-effective train control technologies to reduce the risk of train collisions.		
University of Alabama Project: Vehicle Proximity Alert System	250	.....
University of Nebraska Project: Track Subsurface Stability	250	.....
University of Missouri Project: Advanced Composites for Bridge Repair	250	.....
Subtotal: Track and Vehicle Track Interaction	7,864	8,300
RAILROAD SYSTEMS SAFETY		
Grade Crossings:		
High-Speed Rail Safety Support	200	200
Evaluate the reliability, safety record, and maintenance costs of high-speed rail systems and disseminate this information.		
Environmental Impact Analysis	200	200
Evaluate effect of noise in HSR operations and develop a facility to evaluate mitigation measures; evaluate EMF effects.		
Safety of HSGT:		
Accident Avoidance	1,800	1,800
Assess the safety of prototype high-speed rail positive train control demonstrations; evaluate migration paths for existing train control to commuter rail and advanced systems; assess the corridor risk; assess system safety support; develop fire safety analysis program.		
Grade Crossing & Infrastructure	700	300
Evaluate driver behavior at high-speed grade crossings; evaluate innovative grade crossing warning devices; support development of track safety standards for high-speed operations.		
Accident Survivability	1,400	1,400

[Dollars in thousands]

Program activity/project	Fiscal year 2000 enacted	Fiscal year 2001 request
Model crash energy management for occupant protection; test new fire safety standards for seats and other materials; assess system safety and emergency preparedness evaluations; evaluate of glazing and platform safety issues associated with high-speed operations; analyze vehicle track interaction.		
High-Speed Test Support Equipment	500	500
Acquire advanced test support equipment to maintain the safety of the high-speed test track structure and to ensure safe testing at the FRA's Transportation Technology Center.		
Performance-Based Regulations	.....	500
Evaluate methods for developing performance-based regulations for their applicability to FRA's regulatory safety process.		
Subtotal, Railroad Systems Safety	4,800	4,900
R&D FACILITIES AND TEST EQUIPMENT		
T–6 Vehicle	500	500
Upgrade or replace as necessary the Government's current track research vehicle, T–6, used to assess and develop new technologies for automated track inspection.		
TTC Support	.....	850
Perform timely refurbishment or replacement of facilities and equipment at the Transportation Technology Center.		
Subtotal, R&D Facilities	500	1,350
Total R&D	22,464	26,800

R&D FIVE-YEAR PLAN

Question. The fiscal year 1997 Senate report (S. Rpt. 104–117) directed FRA to prepare and submit a 5-year strategic research plan that also incorporated next generation high speed rail research initiatives. This plan has never been formally submitted to the Committee. Why not? Will the plan, when it is submitted, reflect the ongoing review of FRA's research program by the Transportation Research Board?

Answer. FRA undertook the development of a 5-year plan for research and development and for the next generation high-speed rail program following the direction of the fiscal year 1997 Senate report and has been updating it annually in draft form ever since. The R&D and next generation staff have benefitted from the discipline of preparing these drafts, and our budget requests reflect the updated plans. These drafts have never reached final form in a time frame useful to the Committee, since the R&D budget has changed during this time, and would have been obsolete if submitted. FRA staff is working on another updated draft, which we plan to submit to Congress this summer.

FUNDING OF TRB REVIEW

Question. What is the funding status and outlook for continued support of the TRB review of the R&D and next generation programs? Will you continue that activity during fiscal year 2001? Are there sufficient funds?

Answer. The TRB review of FRA's R&D and Next Generation programs is funded through fiscal year 2000, and FRA intends to continue the activity in fiscal year 2001 even though no funding is explicitly requested in the fiscal year 2001 budget request. FRA will fund this support by using project funds from each area of its R&D and Next Generation programs. The TRB activity is important in the project selection and program evaluation process.

FRA RAILROAD RESEARCH AND DEVELOPMENT

Question. Please update the Committee on FRA's responses to each of the recommendations issued by the Transportation Research Board Committee for Review of the FRA R&D and High Speed Rail Program. In your answer please be certain to show how changes are reflected in the fiscal year 2001 budget request.

Answer. Following are FRA's responses to the most recent recommendations issued by the TRB Review Committee:

Recommendation 1.—The committee recommends that the FRA Administrator, in coordination with the Office of Safety and the Office of R&D, take the necessary steps to improve FRA's data collection so that the multiple contributing factors involved in an accident can be correctly identified and analyzed and the sequence of events characterized. One of the numerous benefits of more accurate and complete accident data would be the ability to conduct R&D in closer balance with actual safety risks. This effort could be initiated with a research project that would define the need for improved safety data and develop a taxonomy of causes. (A random sample of actual accidents could be analyzed to provide a basis for identifying root causes. For example, in conjunction with the American Public Transit Association, FRA is conducting a full causal analysis of a sample of low-speed commuter rail accidents.) Consideration should be given to collecting data on incidents (near-misses), in addition to accidents, that could indicate areas in which accidents might be avoided or prevented (recognizing the limitations of voluntarily reported data). To the extent that they are not fully exploited now, additional data sources that could be used to determine accident causes include National Transportation Safety Board reports, Office of Safety railroad audits, and FRA dossiers on individual accidents. [Analysis of incidents can be useful in determining mechanisms that helped prevent an incident from becoming an accident, as well as in identifying new trends and developing countermeasures. Companies have such information, but generally do not share it with government agencies. It might be possible for a neutral third party to serve as a repository for this information, with company and individual identifiers being removed (similar to the Aviation Safety Reporting System, administered for the Federal Aviation Administration by the National Aeronautics and Space Administration through its contractor Battelle Memorial Institute).]

FRA's Response.—While FRA recognizes that better accident data would be helpful, FRA does not intend to undertake a rulemaking in the near future to change the reporting of accidents and incidents. The most recent rule on data collection was issued only three years ago. There are a number of regulatory topics that are of higher priority at the present.

Current reporting thresholds for Railroad Accident and Incident Reporting System of $6,500 in equipment damage allows for collection of accident data on many incidents that have no fatalities or injuries. From a safety perspective, these are indeed near misses. Collecting additional information on the sequence of events that result in harm should be focused on events that result in injuries or fatalities. This is already the case since, between FRA and NTSB, investigations are conducted in all incidents which result in an employee fatality and many others involving passenger and highway fatalities.

FRA R&D managers review FRA and NTSB accident reports on a regular basis. That is, the R&D program is conducted with an understanding of the sequence of events that result in accidents and harm. Also, railroads often share data with the FRA to support focused research objectives. FRA does not believe that a neutral third party information repository is necessary.

Recommendation 2.—[The harm index for grade crossings was reduced, and losses associated with trespassers were excluded, even though each of these represents a large proportion of railroad-related fatalities and injuries.] The correlation between budget allocation and total risk should be improved by including all sources of loss (or harm).

FRA's Response.—Property damage, trespassers, and highway user fatalities are included in the updated analysis. In fact, trespassers and highway user harm was included in the previous analysis. Research has been conducted on many of grade crossing-related topics, including lowering the cost of improvements for grade crossings. FRA has satisfied the TRB committee that, taken together with other things the Department is doing, FRA is investing an appropriate amount in R&D related to grade crossing.

Recommendation 3.—As the next step, FRA should assess how to connect the separate approaches used for risk assessment of the program areas and for project evaluation.

FRA's Response.—Project evaluations were intended as a tool for individual project selection, not as a way to aggregate risk to the program areas. In the current

process, specific risk attributes are connected with each project. A specific accident may result or be connected to a number of projects, such as engineman vigilance, train control, crashworthiness, and emergency preparedness. When aggregating the risk to the program level, there will inevitably be some level of double counting. The real value in the process is in assuring that all understood risk is considered in developing research plans.

Recommendation 4.—Once the above improvements to the risk assessment process have been made, the committee recommends that FRA begin using this process to assess the R&D projects slated for the fiscal year 2001 budget.

FRA's Response.—The Volpe Center will attempt to complete a failure analysis for FRA for all accident types during the summer of 2000, in time for the fiscal year 2002 budget proposal. The analysis was not available to assess projects slated for the fiscal year 2001 budget.

Recommendation 5.—The committee recommends that FRA continue to use the regulatory analysis outlined by the R&D staff at the meeting to encourage R&D efforts in support of the move toward performance-based standards and procedures. With respect to Recommendation 1 above, accurate safety data are also critical to the development of metrics and measurements needed to support performance-based standards. (For example, in the commuter rail analysis mentioned above, most of the accidents have been attributed to wheel/rail causes. The data generated by this analysis could be used to support the development of performance-based standards.)

FRA's Response.—FRA recognizes the need to use more performance-based standards and procedures and has begun working with the FAA to get their insight on the issue of performance-based regulations. FRA has requested funding for performance based regulations research in its fiscal year 2001 budget. In the meantime, we expect to continue with meetings and in-house staff analyses.

Recommendation 6.—The committee recommends that FRA engage in discussions with researchers in these other fields (e.g., aviation) to a greater extent than is currently the case in order to utilize existing knowledge and avoid replication of available research.

FRA's Response.—The process presented will identify multiple causes of harm. Consequently, human factors issues will receive proper emphasis. FRA will consider human factors research from other domains when addressing incidents with human factors components. FRA has been an active participant in the Department's Human Factors Coordinating Committee (HFCC) and the Fatigue Working Group. Both of these groups, which are made up of representatives from all of the DOT Operating Administrations including FAA, share research ideas and results. Dr. Thomas Raslear, of FRA's Office of R&D, is the current HFCC Chair. FRA has worked closely with the highway mode in particular in the fatigue vigilance monitoring effort.

Recommendation 7.—The committee recommends that the FRA Administrator, in coordination with the Office of R&D and the Office of Policy and the appropriate offices within FHWA, should develop a plan for policy research related to grade crossings and aggressively press for research related to standardization of grade separations and crossing elimination. This research should draw on successful practices in individual states, as well as other countries. These efforts would not necessarily be costly, and should involve both state officials and researchers exploring new concepts and approaches. The committee encourages the initiation of such research as soon as possible, with a project proposal being included at least in the fiscal year 2001 budget.

FRA's Response.—The FRA Administrator takes the recommendation very seriously and FRA is coordinating efforts of the Offices of Policy, R&D, and Safety with other Federal agencies and the states to aggressively reduce hazards presented by grade crossings. In particular, FRA will be working closely with the ITS Joint Program Office to develop a strategic plan for the development, demonstration, and deployment of ITS technologies at highway-railroad grade crossings. The development of standards for ITS and grade crossings was initiated at a well-attended workshop this summer. FRA has included $500 thousand in its fiscal year 2001 budget for a national grade crossing outreach program.

Recommendation 8.—The committee urges that in the future, the staff of the Next Generation High-Speed Rail Program provide the committee with more complete reports on program developments, including technical progress reports.

FRA's Response.—The Next Generation High Speed Rail Program staff made a detailed presentation to the Committee at its most recent meeting to keep it apprized of all developments.

RESEARCH AND DEVELOPMENT COST SHARING

Question. Please prepare for each of the R&D categories and subaccounts the amount of cost sharing and the amount of federal funding for each of the last three years.

Answer. The amounts of cost-sharing include estimated values of services, equipment, and materials contributed in-kind to the FRA R&D projects. The following tables list the estimated R&D cost-sharing (in thousands of dollars) with non-Federal entities for fiscal years 1998 through 2000:

TRACK, AND VEHICLE TRACK INTERACTION

Fiscal year	Federal funds	Non-Federal funds
1998	$6,950	$5,750
1999	6,950	4,640
2000	7,864	3,849

EQUIPMENT, OPERATIONS, AND HAZARDOUS MATERIALS

Fiscal year	Federal funds	Non-Federal funds
1998	$5,659	$2,296
1999	7,468	1,300
2000	9,300	676

RAILROAD SYSTEMS SAFETY

Fiscal year	Federal funds	Non-Federal funds
1998	$4,650	$60
1999	4,800	246
2000	4,800	236

R&D FACILITIES & EQUIPMENT

Fiscal year	Federal funds	Non-Federal funds
1998	$770	$1,040
1999	500	901
2000	500	1,000 (est)

RATIONALE FOR LOCOMOTIVE SAFETY RESEARCH INITIATIVE

Question. What is the needs-based rationale for the locomotive safety research initiative? Will there be a regulatory follow-on reflecting the findings of this project?

Answer. An examination of railroad accident reports shows the need to protect locomotive crews against the full range of collision scenarios including oblique/raking collisions, rear end collisions, and grade crossing collisions in addition to head on collisions. Hence most of the work involves simulation modeling and testing of locomotive structures in these different types of collisions. The Office of Safety has a concurrent RSAC Working Group on crashworthiness with the objective of developing regulatory requirements for locomotive crashworthiness. Technical support is also being provided to this working group through the locomotive safety research

initiative. FRA anticipates taking regulatory action, if necessary, based on the findings of this research.

FUNDING FOR THE LOCOMOTIVE SAFETY RESEARCH INITIATIVE

Question. Is the locomotive safety research initiative an ongoing or new research project? If it is ongoing, what prior research efforts and funding have been committed? What is the anticipated fiscal year 2002 cost of the project?

Answer. The locomotive safety initiative is an ongoing research effort. FRA's prior research efforts have focused on head-on-collisions with finite element analyses of the force and crush resulting from the collision. The force and crush indicates the extent to which the crew cab space is invaded and the severity of the collision. FRA's more recent efforts have focused on developing a new, dynamic collision modeling approach suitable for oblique/raking collisions and rear end collisions. This effort is continuing with comparisons of modeling results with actual collisions. Also, parametric evaluation of improved locomotive structures is anticipated. In addition, the FRA R&D supports an ongoing Railroad Safety Advisory Committee Working Group's efforts on Locomotive Crashworthiness, with research for model development, design improvements, and fuel tank crashworthiness evaluation. The funding for these efforts was $600,000 in fiscal year 1996, $300,000 in fiscal year 1997 and fiscal year 1998, and $600,000 in fiscal year 1999. The current fiscal year 2000 budget is $1,800,000. Fiscal year 2000 funds are committed to planning a locomotive component test program, designing the testing fixtures, and planning one or more full scale train to train collision tests at TTCI in Pueblo, Colorado. Simulations of the proposed tests, to be conducted, will be used to select the train consists and precisely predict the outcome.

In fiscal year 2001 and fiscal year 2002, the full-scale locomotive structural components crashworthiness tests and one or more full-scale train-to-train collision tests would be conducted and the results evaluated. The findings will complete the development of crashworthiness regulatory requirements. In addition, some efforts would be devoted to emergency egress and fire safety. For fiscal year 2001, $2,950,000 in funding is requested.

FULL-SCALE CRASH TESTING

Question. What is the status of your full-scale crash testing of rail passenger and locomotive equipment? What is the anticipated schedule for implementing this project? Please detail the funding history for this program, and outline what follow-on cost will be required to complete the project.

Answer. On November 16, 1999, FRA conducted a test of a single passenger rail car crash into a rigid barrier at the Transportation Technology Center (TTC). On April 4, 2000, a second test was conducted with two coupled passenger cars crashing into the barrier. Before the end of fiscal year 2001, two more impact tests are planned in which passenger cars will strike locomotives. In addition, collision tests of modified equipment and tests of oblique collisions will be conducted are planned in future years.

In fiscal year 1999, the impact testing for passenger rail cars was funded at $2 million. In fiscal year 2000, passenger car and locomotive impact testing is continuing, utilizing $3.6 million in funding. In fiscal year 2001, a total of $5.4 million is included for this project. This project will continue into fiscal year 2004.

GRANT TO MONTANA STATE UNIVERSITY AT BOZEMAN

Question. In the fiscal year 2000 appropriations bill, Congress directed that $250,000 be provided to Montana State University at Bozeman to pilot real-time diagnostic monitoring of rail rolling stock. Has this contract been awarded? How does this contract complement FRA's ongoing work with on-board freight car condition monitoring systems?

Answer. The FRA is currently reviewing the grant application from Montana State University. The grant award has not been made. The draft Statement of Work describes their effort to develop a locomotive health monitoring system as an add-on device for older locomotives or as original equipment for new locomotives. The system would determine the operating condition of locomotive electrical, mechanical, and air brake systems and be able to provide the information to shop forces over a digital communications link. The initial components of this system will be an on-board intelligent lubrication prognostics system and a communication system capable of sending the information from the locomotive to control centers and maintenance facilities. The locomotive health monitoring system will provide for improved equipment operation and reliability for the railroads and may improve safety.

FRA's on-board freight car condition monitoring system is aimed at collecting information on safety-related parameters such as brake piston travel, bearing temperatures, vibrations, and the like. The information will be sent from the freight cars to the locomotive cab over the communications channel of new electronically-controlled pneumatic (ECP) brake systems. The information can then be sent to control centers and maintenance facilities over the same radio channels used by the locomotive health monitoring system.

FISCAL YEAR 1998—2000 FUNDING FOR HUMAN FACTORS PROGRAM

Question. Please provide an update of the progress that has been made in the human factors program since last year. How much of the fiscal year 1998, 1999, and 2000 allocated funds have been spent, and for which purposes?

Answer. Following is a summary of the progress on projects during fiscal year 2000, project objectives, and funding for fiscal years 1998 and 1999 and 2000. New phases or extensions of on-going research are identified where applicable.

Train Operations

1. A study design for Engineer Napping Strategies was finalized in June 1999. A pilot test of the study design was scheduled to follow immediately, resulting in refinements to test and analysis approaches by the end of the year. This work has been put on hold due to a catastrophic failure of the RALES simulator, where a majority of the work was to be conducted. The primary purpose of this research is to determine to what extent and what types of on-duty napping can improve locomotive engineer performance and safety. Realistic guidelines can then be developed for the implementation of strategic napping policies in the industry. Future year funding will be needed to complete this project.

Fiscal year:	
1998	$400,000
1999	100,000
2000	150,000

2. A preliminary catalogue of Vigilance Monitoring devices, suitable to non-obtrusively measure alertness in on-duty locomotive engineers, was completed in January 1999. Three devices have been selected for testing and efforts continue to identify other promising technologies. Suitable devices will be used in simulated and revenue operations to gather data and test their usefulness in the railroad-operating environment. The purpose of these tests is to provide information on the validity and reliability of such devices, for the use on railroads, which may wish to use this technology to manage employee fatigue.

Fiscal year:	
1998	$300,000
1999	200,000
2000	250,000

3. The Dispatcher Workload, Stress and Fatigue, Phase III project, to determine the factors that affect workload, stress and fatigue, has been completed and the final report is expected in June 2000. Phase IV, to study staffing and scheduling issues, has begun and will be completed in September 2000.

Fiscal year:	
1998	$225,000
1999	200,000
2000	50,000

4. New technology in the form of communications and computerization is changing the way the railroads operate. Previously, the effects of new technology, such as automation, and information-mediated fatigue on locomotive engineer vigilance (High-Speed Operator Stress and Fatigue), were only considered in high-speed operations. Two reports on high-speed operations and technology were completed by the Volpe Center and will be revised per FRA comments. These studies evaluated situational awareness and the monitoring of equipment failures under three operational conditions: manual control, cruise control, and full automation, and examined the role of preview displays in operator workload and performance. The project focus was expanded to include all railroad operations because of the rapid introduction of technology throughout the industry, and the project was renamed (Information Management and Control in Railroad Operations). The project will determine the safety implications of increased information flow and new information management technology in normal and high-speed operations for locomotive engineers and dispatchers. Out year funding will be needed to evaluate related issues.

Fiscal year:

1998	$200,000
1999	200,000
2000	308,000

5. The final report on Dispatcher Training Evaluation was published in 1998, and a workshop on the findings of the report was held in Chicago in October 1998. Workshop participants expressed a need for information concerning the selection of personnel for dispatcher training, and this issue is currently being addressed in Phase III, which will develop selection criteria for dispatchers and also develop training materials for readback/hearback, based on an FAA program for air traffic controllers.

Fiscal year:

1998	$57,000
1999	200,000
2000	.....

6. A new initiative, Evaluation of Human Factors Safety Issues in Digital Communications, was begun in fiscal year 1999. This multi-year project will examine the human factors implications of using digital communications between locomotive engineers and dispatchers. Currently, such communications are by voice, which has proven to be less efficient and precise than digital communications. Transition from voice to digital communications will change the task of the locomotive engineer. Therefore, the human factors effects of this transition need to be evaluated. A report on datalink party line communications between dispatchers and locomotive crews is in preparation, and work began on a datalink tool for maintenance-of-way crews.

Fiscal year:

1998	.....
1999	$100,000
2000	300,000

7. The Advanced Display Interface project develops innovative information displays to improve information management by locomotive engineers, dispatchers, and traffic managers. Virtual reality displays and associated software were developed and completed in January 1998. A video demonstration of the displays was completed in September 1998. Software, which was previously developed under this project, is being converted to a Windows operating system, and a stringline interface and planning tool is under development. Future work will explore a test site in which to demonstrate the applicability of the display to revenue service.

Fiscal year:

1998	$200,000
1999	78,000
2000	400,000

8. A new initiative, Post-Accident Stress in Locomotive Engineers, began in fiscal year 1999. The first phase, which will be competed in December 2000, will determine the descriptive epidemiology (incidence and prevalence) of Post-Traumatic Stress Disorder (PTSD) in locomotive engineers resulting from on-duty crashes. PTSD is debilitating and may compromise safety, so the magnitude of the problem is important to determine for future resource allocation. The second phase will develop a model treatment intervention for locomotive engineers immediately following crashes that result in traumatic injuries or loss of life.

Fiscal year:

1998	.....
1999	$100,000
2000	50,000

9. Operating rules form the basis of safe operations in the railroad industry. Previous work on the Operating Rules Evaluation and Safety Rules Consolidation project has focused on the influence of railroad corporate culture on compliance with operating rules. A final report on rules compliance and corporate culture was published in October 1999. All safety procedures, including operating rules, continuously expand and increase in numbers to avoid past accidents and incidents. These additions to the rule books become increasingly restrictive over time and reduce the range of permitted actions to far less than what is necessary to complete a job under normal conditions. As a result, compliance with rules decreases, and the rules no longer function to promote safety. A major railroad has requested assistance to consolidate all their safety rule books currently in use (8) into a single book. The con-

solidation should enhance safety and provide a model for other railroads. This effort will also serve as a platform from which to launch projects on teaming and behavior-based safety. This work was begun in fiscal year 1999 and is expected to continue into fiscal year 2001.

Fiscal year:	
1998	$50,000
1999	50,000
2000	70,000

10. The Switching Operations Fatality Analysis project in conjunction with FRA's Office of Safety, rail labor and rail management, completed a review and evaluation of the causes of fatal accidents involving switching operations. A final report was produced and follow-on work will continue.

Fiscal year:	
1998	.....
1999	$200,000
2000	200,000

11. The Teaming of Operating Personnel project will define crew resource management for the railroad industry. This project, which will begin in fiscal year 2000, will use the base of labor-management cooperation established in the Safety Rules Consolidation project to develop group dynamics that enhance the safety of railroad operations.

Fiscal year:	
1998	.....
1999	.....
2000	$300,000

12. The High-Speed Rail Simulator project will begin in fiscal year 2000. The project will evaluate the Amtrak High-Speed Training Simulator to determine its usefulness as a research tool for future research projects. In out years, the project will fund changes to the simulator to allow its use as a research tool (if necessary) and to conduct studies on human factors in high-speed operations.

Fiscal year:	
1998	.....
1999	.....
2000	$100,000

Yard and Terminal

13. A final report on the multi-phase Yard and Terminal Safety study is expected by the end of fiscal year 2000. The report will characterize the practices and conditions that contribute to yard and terminal injuries so that remedial actions can be investigated. For instance, slips, trips, and muscles strains were determined to constitute almost 50 percent of injuries in the yard and terminal environment, and this information will serve as the basis for a new project focused on ergonomic issues.

Fiscal year:	
1998	$150,000
1999	100,000
2000	150,000

14. The Ergonomic Issues project will build on the results of the Yard & Terminal Safety project to focus on ergonomic means to avoid the slips, trips, and muscle strains that constitute almost 50 percent of all yard and terminal injuries. The project will start in late fiscal year 2000.

Fiscal year:	
1998	.....
1999	.....
2000	$200,000

15. The Maintenance-of-Way Safety project will begin late in fiscal year 2000. The project will focus on fatigue issues for maintenance-of-way workers and will be conducted cooperatively with the industry through the auspices of the North American Rail Alertness Partnership.

Fiscal year:	
1998	.....
1999	.....
2000	$200,000

RAILROAD FATIGUE COUNTERMEASURE PROGRAMS

Question. What is FRA doing to either monitor or evaluate working schedule pilot programs or other fatigue countermeasures now being implemented by various railroads? What is the relationship between this work and the $300,000 requested for the fatigue countermeasures campaign under the "Safety and Operations" account?

Answer. Staff from the Human Factors program regularly attend meetings of the North American Rail Partnership (NARAP) and serve on several of its standing committees. NARAP has monitored programs for fatigue management since its inception and publishes a report, "Current Status of Fatigue Countermeasures in the Railroad Industry", on a regular basis. The evaluation of working schedule pilot programs, however, has not yet begun, although NARAP recognizes the necessity of this process. The Human Factors program has facilitated the start of an evaluation program at NARAP by providing a one-day seminar on program evaluation, complete with materials, and taught by a nationally recognized expert on program evaluation. The "Safety and Operations" funding request for $300,000 would, in part, assist NARAP to implement a systematic program evaluation of its various fatigue countermeasures. The Human Factors program staff would serve as consultants to this effort, but the Human Factors program would not provide funds.

GRADE CROSSING SAFETY RESEARCH FUNDING

Question. Please provide a break down of how the $835,000 requested for grade crossing safety research will be allocated.

Answer. The requested $835,000 for grade crossing safety research will be allocated as follows:

Compendium of Grade Crossing Research	$70,000
Evaluation of Driver Education Programs	155,000
Freight Car Reflectorization	30,000
Railroad Horns	30,000
Optimal Acoustic Warning	70,000
Causal Analysis of Accidents	110,000
Evaluation of Driver Behavior	90,000
High Speed Rail Crossing Technologies	35,000
Review of Data Sources	60,000
Evaluation of School St 4-Quad Gates	100,000
CRAMCAT [1]	60,000
Technology Transfer with Other Research Organizations (UIC, ERRI, etc.)	25,000
Total	835,000

[1] Corridor Risk Assessment Methodology Crossing Analysis Tool.

EVALUATION OF PTC AND ITS SYSTEMS

Question. The budget justification states that research support is needed in fiscal year 2001 to continue evaluating PTC and ITS for use in grade crossing safety. Please discuss the scope and nature of this research and relate this activity to that conducted during fiscal year 1999 and thus far during fiscal year 2000. What are the initial results of this investment?

Answer. Implementation of PTC on high-speed corridors in Michigan and Illinois and on the Alaska Railroad is behind schedule and no evaluations were conducted in fiscal year 1999. Now that revenue service testing of the Incremental Train Control System, which incorporates monitoring and advanced activation of grade crossings, has begun in Michigan, FRA will soon be able to initiate evaluation activities.

FRA has worked with DOT's ITS Joint Program Office to develop an architecture for ITS at highway-rail intersections and to initiate work on standards. FRA has been meeting with Standards Development Organizations, who are being instructed to incorporate PTC systems into the standards they develop.

VOLPE GRADE CROSSING PLAN

Question. What is the status of the work of the Volpe National Transportation Systems Center on a research plan regarding the safety of highway-railroad grade crossings? Was the plan ever published? How is the Volpe work different from Operation Lifesaver activities?

Answer. The Volpe National Transportation Systems Center (VNTSC) assists the FRA's Office of Research and Development with all programs in developing a process for project selection and program development with a strategic focus on safety.

For the grade crossing safety program, this process is approximately 75 percent complete. The process involves five steps: a review of historical and potential sources of accidents and incidents; a failure analysis; a determination of countermeasures requiring research and development; the development and prioritization of individual projects; and the selection of projects for funding. The process results in an on-going, internal working document that is not intended for publication.

Operation Lifesaver is primarily a public awareness and driver education program related to grade crossing safety, whereas the VNTSC program addresses all aspects of grade crossing safety, including human factors, grade-crossing technology, and accident causation.

IMPACT OF TRACK RESEARCH ON REGULATIONS

Question. How is your proposed track research related to the development of new regulations at the FRA? What track-related regulations have been recently issued or are being considered for future issuance?

Answer. All FRA proposed research on track and vehicle/track interaction is related to the development of new performance-based safety regulations as well as the implementation of newly issued or revised rules. During the past two years, revised track safety standards were issued for conventional classes of track supporting speeds of up to 80 mph. In addition, new rules were developed and published for tracks supporting speeds up to 200 mph.

Below are some proposed research activities and their relationship with newly issued standards and/or future rulemaking activities:

Rail Defect Replacement Time.—In the fiscal year 2001 budget, research is proposed to continue work on factors that influence the formation and growth of internal rail defects. This research would allow FRA to better predict the growth of rail defects. Based on this research, regulations are likely to be modified to reflect rail defect removal based on a prioritized schedule.

Gauge Widening.—In the fiscal year 2001 budget, research is proposed to develop data for inspection frequency and to monitor the implementation of new standards on gauge widening inspection. In fiscal year 1999, safety standards for high-speed rail were issued that require a yearly inspection using a gauge restraint measurement device, along with twice weekly visual inspections. Safety rules for lower class tracks are being developed now to provide an alternate tie inspection requirement that combines gauge restraint measurement with less frequent visual inspection.

Track Degradation Model.—In the fiscal year 2001 budget, the proposed research would focus on the development of a comprehensive track surface degradation model. Safety rules and potential waivers for inspection frequencies could be developed with results from this model. Rail Wear Limits: In the fiscal year 2001 budget, the proposed research will investigate actual or potential problems associated with worn rails to determine whether there should be wear limit standards. If standards are required, the rail wear limits also would be determined.

Passenger Wheel and Rail Profile Standards.—In the fiscal year 2001 budget, the proposed research would continue to support the development of safety standards and guidelines for passenger car wheels, rail profiles, and surface conditions with APTA. From the past work of this joint research, a recommendation was produced for a minimum flange angle on passenger wheels to prevent and reduce wheel climb derailments. Future research would develop profile measurement standards and investigate the feasibility of a way-side monitoring system.

Buckling of Continuously Welded Rail.—In the fiscal year 2001, the proposed research would continue to support the development of safety standards and guidelines for maintaining and repairing continuously welded rail tracks to prevent buckling.

TRACK AND COMPONENTS RESEARCH

Question. What track and components research would be deferred if FRA did not receive the requested $500,000 increase for the vertical support assessment project, and the agency was directed to follow its own priorities within the current services funding level?

Answer. If FRA did not receive the requested $500,000, the vertical support assessment project would be deferred. Deferring this work would adversely impact other related track structure and subsurface condition assessment research currently in progress. The most significant is the development of a comprehensive track degradation model which would be delayed due to the lack of adequate data for the vertical modulus, a key parameter. Also, the completion and validation of complementary work currently in progress under FRA's university research grants program would be seriously impacted. This work includes subsurface evaluation of

track using ground penetrating radar and vibratory rail tomography to detect weak locations.

It should be noted that FRA's past research produced a family of instrumented railcars which are capable, at normal track speeds, of measuring track geometry parameters against Federal Track Safety Standards, and produced the GRMS which measures the ability of track to maintain gage to preclude wide gag derailment. New developments in technology in the areas of both data acquisition and processing make it now possible to consider the inclusion of track vertical deflection measurements. In this regard, the proposed project is in consonance with FRA R&D's efforts to apply/adapt existing or emerging technologies to specifically address track related accidents.

RESEARCH ON ADVANCED COMPOSITE MATERIALS

Question. What is the status of the contract for research on advanced composite materials for use in repairing and rehabilitating aging railroad bridges, for which the conferees provided $250,000 to the University of Missouri-Rolla in fiscal year 2000?

Answer. FRA staff is working with University of Missouri-Rolla staff to define the project scope and objective. The University developed a cooperative research package that includes significant non-FRA resources, both cash and in-kind donations over $100,000. On March 14, 2000, FRA received a draft technical proposal from the University. The grant currently is being reviewed by FRA staff and is expected to be awarded by July 2000. This deadline is at the suggestion of the University to coincide with the start of their fiscal year.

PROXIMITY ALERT SYSTEMS

Question. What is the status of the contract for vehicle proximity alert systems interoperability for which the conferees provided $250,000 to the University of Alabama in fiscal year 2000?

Answer. The scope of work for the contract is under development. A white paper prepared by the principle investigators at the University of Alabama on potential railroad crash avoidance technologies was reviewed, and information regarding vehicle proximity alert systems (VPAS) and the Intelligent Transportation System architecture was sent to the University. The development of VPAs system is difficult because none of the vehicle proximity alert systems tested at the Transportation Technology Center (TTC) in Pueblo, Colorado, several years ago worked well enough to continue with field testing in an actual railroad environment.

Two VPAS systems are being tested now. The system developed by Dynamic Vehicle Safety Systems (DVSS) is testing a warning system in school buses and other priority vehicles as part of the Minnesota Guidestar system (the State's overall Intelligent Transportation System program). However, this system does not conform to the architecture of Intelligent Transportation System User Service #30 developed for highway-rail grade crossings. The testing of the University of Alabama system recently started in the Chicago area, but it is too soon to determine if the system will work as designed. FRA will continue to work with the principal investigators at the University of Alabama to develop a suitable scope of work from the interoperability contract.

INTEGRATED TRACK STABILITY

Question. What is the status of the contract for the development of integrated track stability assessment and monitoring systems using site-specific geo-technical/spatial parameter and remote sensing technologies, for which the conferees provided $250,000 to Marshall University and the University of Nebraska in fiscal year 2000?

Answer. On December 13, 1999, FRA met with representatives from Marshall University and the University of Nebraska-Lincoln to develop a research grant framework and implementation plan. FRA staff agreed to assist in the development of a statement of work. The contract will serve as a basis for a single R&D cooperative agreement to be awarded to the two Universities. The railroads, the railroad suppliers' industry, and agencies in both states are to be encouraged to participate and contribute resources, in-cash and/or in-kind. The formal grant application is expected in April 2000, with the grant to be awarded by May 31, 2000.

GRADE GROSSING HAZARD REDUCTION TECHNOLOGIES

Question. Please detail the grade crossing hazard reduction technologies and the associated program costs funded by the $500,000 request for grade crossing infrastructure. Please list these projects in priority order.

Answer.

Project	*Fiscal year 2001 funding*
Four-Quadrant Gate Assessment Model	$150,000
This research fosters development of appropriate and useful analytic tools for future use by State agencies. These funds will support a study to be conducted by the University of Illinois at Champagne-Urbana to develop a theoretical model of safety issues related to the use of four-quadrant gate systems. A four-quadrant gate roundtable discussion is proposed as the initial phase of this work to provide a focused approach to the model's development and possible enhancements.	
Detection of Trains and Vehicles within the Highway Rail Intersection Limits	175,000
This initiative supports the deployment of "off-the-shelf" technologies in the highway-rail grade crossings environment. The current funds support actual operational testing activities at the Transportation Technology Center (TTC), in Pueblo, Colorado, of prototype systems that utilize technologies new to the grade crossing application, yet proven in other fields.	
Photo Enforcement	75,000
Fiscal year 2000 funding will provide a synthesis of techniques, results, and effectiveness of photo enforcement at crossings. The synergies of work by NHTSA and/or FTA will be explored, along with the possibility of joint funding. The fiscal year 2001 budget request would support the development of guidelines for use of photo enforcement at highway-rail grade crossings.	
Guidelines for Obstacle/Intrusion Detection	100,000
This initiative is an overview of system requirements and ongoing work in the area of obstacle/intrusion detection, and will involve the railroad right-of-way in general, as well as grade crossings. The fiscal year 2001 budget request would support the development of systems requirements for obstacle/intrusion detection devices.	

IMPACT OF NO FUNDS FOR PERFORMANCE-BASED REGULATIONS

Question. What railroad systems safety research would be deferred if FRA did not receive the requested $500,000 increase for performance-based regulations, and the agency was directed to follow its own priorities within the current services funding level?

Answer. If FRA did not receive the requested $500,000 for performance-based regulations, FRA would delay this activity until fiscal year 2002. This, in turn, would delay the application of performance-based concepts in FRA's rulemaking processes and might also impede FRA's ability to facilitate the introduction of new and more effective technology.

FUNDING FOR TAMPER/LINER MACHINE

Question. How much of this new funding program request of $850,000 will be used to purchase a tamper/liner machine to maintain the TTC's high speed test track?

Answer. FRA had originally planned to spend $430 thousand for a tamper in fiscal year 2001. However, because the need for a tamper became critical at the end of fiscal year 1999, FRA purchased a new tamper using funds generated from the sale of the aluminum reaction rail at TTC. FRA had planned to spend the funds from the sale of the aluminum reaction rail on other TTC needs, however, the purchase of the tamper was accelerated because (1) the old tamper was becoming increasingly unreliable and was inadequate for the precision required on the high-speed test track, and (2) the test track was essential for testing Amtrak's new high-speed trains for service from Washington to Boston. In fiscal year 2001, FRA plans to spend the $430 thousand on the items delayed from fiscal year 1999 including:

Repairs to roofs (some of which are currently leaking)	$180,000
Upgrading the fire alarm systems to eliminate deteriorating components and to meet current code requirements	150,000

Engineering and update of facility drawings and site master plan, including facilities, utilities, environmental compliance systems, and communication lines	100,000
Total	430,000

TESTING USING THE HIGH-SPEED TEST TRACK

Question. What publicly-owned passenger railroads have performed testing on the high-speed test track over the past two years? What tests are scheduled for the next year?

Answer. Passenger equipment test programs conducted on the high-speed test track by publicly-owned railroads over the past several years include:

Long Island Railroad—Tests of EMD dual-mode locomotive and single-deck Kawasaki commuter cars	7–1–97 through 9–1–97
MARC (Maryland Mass Transportation Administration)—Tests of double-deck Kawasaki commuter cars	5–28–97 through 8–1–97
Amtrak Talgo Trainset	11–98 one week
Amtrak High-Horsepower Locomotive	11–16–98 through 2–28–00
Amtrak Acela High-Speed Trainset	3–15–99 through 2–28–00
Amtrak Advanced Civil Speed Enforcement system tests	11–30–98 through 12–18–98
Japanese RTRI Gauge-Change Trainset	6–01–99 through 3–31–01

Proposed Passenger Equipment test programs on the high-speed test track for 2000:

Amtrak Surfliner	April 2000
FRA/Bombardier Gas Turbine Locomotive (for service on Amtrak)	Late 2000

NGHSR OST/OMB BUDGET REQUEST

Question. Please present the Next Generation High-Speed Rail Program budget request as it was submitted by FRA to OST and OMB.

Answer. FRA's fiscal year 2001 Budget Request for the Next Generation High-Speed Rail Program was the same at each stage of the budget process, including the OST/OMB budget submissions.

TOTAL NEED FOR DESIGNATED HSR CORRIDORS

Question. What level of funding does the FRA estimate will be needed to develop high-speed rail systems in each of the 12 FRA designated corridors in the U.S.? How much has already been spent and what is the source of those funds? What is FRA's role in developing, promoting or funding these corridors?

Answer. Only eight corridors have been designated thus far: five in 1992, under the ISTEA legislation, and three in 1998, as directed by Congress in TEA–21. The FRA has developed preliminary estimates for implementing high-speed rail at various service levels in the initial five designated corridors.

For the three recently designated corridors, the FRA has preliminary estimates for the Empire Corridor (New York-Albany-Buffalo) and is well along in developing such estimates for the Keystone Corridor (Philadelphia-Harrisburg). For the Gulf Coast Corridor (Houston-New Orleans-Mobile with a branch linking New Orleans and Birmingham), feasibility studies are still ongoing and no comprehensive estimate exists. Table 1 summarizes the known cost estimates for future development of high-speed rail at various service levels in the designated corridors. Except where noted, the source is FRA's commercial feasibility study report, High-Speed Ground Transportation for America (1997).

TABLE 1.—ESTIMATED FUTURE INVESTMENTS TO ATTAIN HIGH-SPEED RAIL

[Cost Estimate—Dollars in millions unless otherwise noted]

Corridor	Year designated	90 mph	110 mph	125 mph	Comments
Pacific Northwest	1992	$598	$859	$1,233	Corridor links Eugene-Portland, Ore., Seattle, Wash., and Vancouver, B.C.

TABLE 1.—ESTIMATED FUTURE INVESTMENTS TO ATTAIN HIGH-SPEED RAIL—Continued

[Cost Estimate—Dollars in millions unless otherwise noted]

Corridor	Year designated	90 mph	110 mph	125 mph	Comments
California North-South	1992	$25 billion (State estimate) for a new, 200 mph system. (Source: High-Speed Rail Authority, Building a High-Speed Rail System for California, Draft Business Plan, January 2000.)			The State of California (High-Speed Rail Authority) is actively pursuing a possible new high-speed rail (200 mph) system, for which their most recent published estimate is shown. Maglev (300 mph) is also being considered; the technology selection would be made as part of pending environmental work.
Chicago Hub Network	1992	1,062	1,487	2,438	Estimate covers three spokes radiating from Chicago to: Detroit, Milwaukee, and St. Louis. (The recent extensions from Milwaukee to the Twin Cities, and from Chicago to Cincinnati, are not included in the estimate.)
Florida	1992	1,235	1,305	1,494	Corridor links Tampa, Orlando, West Palm Beach, and Miami.
Southeast Corridor	1992	([1])	1,047	([1])	Estimate covers line between Washington, D.C., Richmond, Va., and Raleigh-Greensboro-Charlotte, N.C. (Subsequently designated extensions to Hampton Roads, Va., Atlanta-Macon, Ga., and Columbia, S.C.-Savannah, Ga.-Jacksonville, Fla. are not included in the estimate.)
Empire Corridor	1998	([1])	([1])	1,932	Estimate covers entire route between New York City, Albany, and Buffalo, N.Y.
Keystone Corridor	1998	([1])	([1])	([1])	Estimate will be available later in calendar 2000.
Gulf Coast Corridor	1998	([1])	([1])	([1])	Preliminary studies are ongoing; estimates not yet available.

[1]Not available.

Table 2 presents actual investments in improved rail passenger service, by State, corridor, and funding source, in the decade of the 1990s.

TABLE 2.—PAST INVESTMENTS TO IMPROVE RAIL PASSENGER SERVICE IN DESIGNATED CORRIDORS

[Funding by source (dollars in millions) in 1990s]

State	Corridor	State	Local	Amtrak	Federal	Railroads	Total
Washington	Pacific Northwest	$120.0	$6.4	$80.0	$3.7	$225.0	$435.1
California	California Corridor and connecting lines: improvements to existing conventional rail segments.	1,215.1	161.0	390.1	69.2	95.2	1,930.6
Illinois	Chicago Hub Network	34.0	1.0	.....	37.3	.....	72.3
Michigan	Chicago Hub Network	42.0	3.0	.....	19.4	.....	64.4
North Carolina	Southeast Corridor	112.7	1.5	.....	52.4	.....	166.6
Virginia	Southeast Corridor	3.9	6.5	.....	41.7	5.0	57.1
New York	Empire Corridor	153.4	10.0	70.6	55.2	.....	289.2
Pennsylvania	Keystone Corridor	.....	0.5	30.0	.....	.....	30.5
Totals		1,681.1	189.9	570.7	278.9	325.2	3,045.8

The FRA has endeavored to assist the States, with both appropriated funding and technical support, in developing and promoting these corridors. In recent years, the Congress has made available $5.25 million annually in highway-rail grade crossing improvement funds under Section 1103(c) of TEA–21. In each of fiscal years 1996 and 1997, $1 million was made available to the FRA, and allocated to the States, for corridor planning. For fiscal year 2001, the FRA has requested $468 million to increase train speeds on track nationwide, which would be matched on at least a 50/50 basis by the States and/or Amtrak. Some of these funds might be used on these corridors.

Independent of funding levels, however, the FRA has served as a catalyst for high-speed rail development nationwide. The FRA has considerable expertise in high-speed rail planning as a result of its over three decades' experience in North-

east Corridor planning, engineering, and implementation, and in its capacity as the Federal agency concerned with railroad safety. As a result, FRA has been able to provide expert advice to the States and Amtrak on the design and prioritization of corridor investments; on the environmental processes as they relate to high-speed rail; on the evaluation of alternatives; and on the safety aspects of infrastructure and equipment improvements.

For example, the FRA applied this expertise to its commercial feasibility study of high-speed ground transportation, which continues to provide both Amtrak and the States with a blueprint they can use for the future development plans. FRA successfully completed the environmental process for the electrification extension in the Northeast Corridor, thus making possible this quantum leap forward in Amtrak's performance. More recently, FRA has assisted Amtrak and the States with focused staff assistance in the preparation of detailed planning reports on specific corridors. The FRA stands ready to continue its critical role of catalyst in response to the expressed interest of the States and Amtrak.

CORRIDORS WITH HIGH BENEFIT-TO-COST RATIOS

Question. Which high-speed rail corridors offer the highest benefit-to-cost ratios? What factors would FRA use to judge the benefits and costs of high-speed rail projects? Will FRA develop a list of funding priorities for high-speed rail projects, and how will this list be tied to the projects' benefits and costs? If not, how can FRA target limited funding to the corridors that offer the most benefits?

Answer. The Administration believes that Federal investments should be justified by examining public benefits versus public costs. The designated high-speed rail corridors produce highly favorable ratios under this test. A list of the highest-performing designated corridors in order of decreasing benefit-to-cost ratios follows:

Corridor	Portion	Top speed (mph)	Ratio of public benefits to public costs
Southeast Corridor	Washington, DC—Charlotte, NC	110	207.0 to 1
Empire Corridor	New York—Albany—Buffalo	125	3.7 to 1
California	Los Angeles—San Diego only	90	3.3 to 1
Chicago Hub Network	Chicago to: Detroit, Milwaukee, St. Louis only	110	2.8 to 1
California	Bay Area—Los Angeles (via Coast Line)—San Diego	90	2.0 to 1
Pacific Northwest	Eugene, OR—Portland—Seattle, WA—Vancouver, BC	90	1.6 to 1

The extremely high ratio for the Southeast Corridor (Washington-Charlotte) reflects the fact that the denominator of the ratio approaches zero when revenues very nearly approach costs. This occurs here because of connecting traffic to the Northeast Corridor. FRA does not have benefit/cost projections for the recently-designated Keystone and Gulf Coast corridors.

The Expanded Intercity Rail Passenger Service Program is not targeted towards the 8 high-speed rail corridors. It is available for improved rail services nationwide, including increasing speeds at levels below high-speed.

Since the funding program will require at least a 50 percent contribution from State or other Amtrak funds, the FRA anticipates that much of the project screening will occur at the level of State/Amtrak partnership negotiations. States will only apply for projects that justify significant State involvement, and Amtrak will need to manage its corporate funds so as to secure the maximum return from its own high-speed rail investments. Furthermore, as FRA's commercial feasibility report indicates, the States are uniquely positioned to consider localized benefits and costs (such as economic, job, and land-use impacts) in evaluating whether to proceed with high-speed rail. For all these reasons, the FRA anticipates that the States and Amtrak will have significant input into the Secretary's decisions regarding grants under the proposed program.

FRA would use a combination of factors, as described in the commercial feasibility study report, to judge the benefits and costs of high-speed rail projects. These factors would include but not be limited to:

—Projected passengers, passenger-miles, and efficiency factors;
—Percentage of initial investment covered by operating surpluses;
—User benefits as measured by projected system revenues and consumer surpluses;
—Airport congestion delay savings (from reductions in operational delays and passenger delays);
—Highway congestion delay savings;

—Emission savings;
—Energy impacts; and
—Quality and realism of the State/Amtrak project schedule and financial plan for each project, including the amount of overmatch beyond the minimum 50 percent share.

FISCAL YEAR 2001 FUNDING FOR RADIO SPECTRUM

Question. Radio spectrum must be available for many PTC. How does your fiscal year 2001 budget request address this challenge?

Answer. FRA is working closely with the railroad industry to address this need, as well as other issues related to radio spectrum availability. The Association of American Railroads (AAR) sponsors a Wireless Communications Task Force (WCTF) which has representation from all major railroads, Amtrak, and communications suppliers. The FRA and WCTF are working in partnership with the State of Oregon to install state of the art digital radio communications in the Portland area, as well as along both Union Pacific and Burlington Northern Santa Fe railroad routes between Eugene, OR, and Vancouver, B.C. This project addresses new spectrum-efficiency requirements recently imposed by the Federal Communications Commission, assures spectrum availability for railroad operations in general, and also will be used to test digital communications technologies to assure spectrum availability for future PTC systems.

In fiscal year 2001, FRA expects to work with WCTF as well as with the Transportation Technology Center, Inc., both to complete a digital-radio-based equipment location system at TTCI (as proposed in the Research and Development portion of the 2001 request), and to use a part of the funding requested under the Innovative Technologies portion of the NGHSR program, to establish communications test facilities at TTCI. Such facilities are needed to compare the many and varied potential forms of digital radio, which may be either railroad-owned or commercially supplied, to assure the industry that future communications investments provide the necessary capabilities, transmission quality, and spectrum availability for future PTC requirements. A total of $250 thousand will be devoted to radio spectrum projects in fiscal year 2001.

INTEGRATION OF NGHSR TECHNOLOGIES

Question. The NGHSR account includes non-electric locomotive development, train control technologies, and innovative signal and grade crossing technologies. How close are FRA and the industry to integrating these technologies in a revenue setting, i.e., a non-electric locomotive pulling a train over track that includes smart signal and grade crossings, dispatched and controlled by positive train control technologies? When will it be appropriate to work specifically on this kind of technology integration?

Answer. The developing corridors around the Nation are at widely varying performance levels. No single corridor is presently ready to apply all of the developing NGHSR technologies. FRA is working with the various corridors to provide demonstrations which meet the earliest key needs. For example, the Albany to New York City portion of the New York Empire Corridor already has a conventional cab signal train control system, therefore, FRA is working with New York on motive power and grade crossing issues. In Michigan and Illinois, the demonstration train control systems must become operative to permit higher speeds. While each NGHSR demonstration project must take local conditions into account, each project is selected for its general applicability on all corridors. Each project is taken to completion to assure that results are valid and, where possible, provide incremental benefits as a result of the project alone. It is therefore not necessary to focus all efforts on a single corridor to attain ultimate integration of the technology development effort.

TRAIN SEPARATION SYSTEM AND POSITIVE TRAIN CONTROL

Question. Are there any integration or interoperability opportunities between the Northeast Corridor ACES train separation system and the positive train control technologies being developed in Illinois and Michigan?

Answer. Yes. The Amtrak technical personnel who are directing the development and installation of the Northeast Corridor ACSES system are intensely involved in the Michigan and Illinois (North American Joint PTC) projects. As the North American project develops industry standards and a modular onboard approach, needs for freight locomotives to operate into the ACSES territory are constantly monitored. Ultimately, the industry standard platform should provide the basic computer processing power, displays, and other locomotive interfaces so that ACSES capability

can be added to an industry-standard locomotive at minimum cost on a plug-in basis. In addition, the ACSES design has already been modified to employ digital data radio making use of industry standard methods, permitting future addition of other industry standard features to the baseline ACSES system.

TRAIN CONTROL AND LIABILITIES ISSUES

Question. Please outline any legal or liability concerns among the industry concerning the application of positive train control technology in revenue service. Does FRA's budget request or any part of the project budget for the NAJPTC program address this issue? Should resources be allocated to this issue?

Answer. FRA is not aware of any extraordinary legal or liability concerns in the industry related to implementing PTC in revenue service beyond those associated with any new train control system. Control system suppliers and vendors have traditionally dealt with these issues by extensive design verifications and product testing which will also be followed for the NAJPTC demonstration system, in addition to following the safety monitoring processes recommended by the Railroad Safety Advisory Committee, specifically for new microprocessor-based control systems. The liability issues associated with operating the innovative NAJPTC demonstration train control system during the test and installation phase are expected to be covered by insurance obtained by the System Design and Integration (SDI) contractor. Costs for the insurance are expected to be charged to the NAJPTC program; FRA and the other program sponsors will have better estimates of these costs, as well as any other major issues, after April 2000, when the SDI bids are expected.

ILLINOIS PTC PROJECT

Question. Please update the Committee on the status of the Illinois flexible block high-speed train control system (now renamed the North American Joint Positive Train Control Program). Why has the line item description of this project in the fiscal year 2001 budget justification changed from "flexible block operation" to "radio-based train control systems?" Please list all the project participants and outline the project's cost-sharing agreement (if any). Please present the funding history for this project, and specify any unobligated federal balances.

Answer. The line item description has changed to indicate that the project objectives have expanded beyond flexible block operation on the Chicago to St. Louis corridor, although the flexible-block objective continues to be a key component of the program. Other issues now being addressed include development of industry-wide standards for PTC. In recognition of the value to the entire industry, the railroads through the Association of American Railroads have pledged $20 million over four years, or 33 percent of the estimated $60 million cost for the program. The State of Illinois has pledged $12 million (20 percent) of the estimated cost, and is also providing $70 million in related funding to upgrade the corridor to make it suitable for high speed operations. Illinois is preparing a grant request for the $6.5 million appropriated to FRA for this project in fiscal year 2000.

The project funding history is as follows:

[In thousands of dollars]

	Federal	State	AAR	Total
Fiscal year 2000 & prior	$17,800	$8,000	$10,350	$36,150
Fiscal year 2001	7,000	3,000	5,000	15,000
Outyears	3,200	1,000	4,650	8,850
Total	28,000	12,000	20,000	60,000

ILLINOIS PTC PROJECT

Question. For the NAJPTC project, please provide an estimate of project costs for fiscal year 2001 and the out-years. Please specify federal funds, industry share, and monies provided by the state of Illinois.

Answer. The total program cost is estimated at $60 million. Funding includes:

[In thousands of dollars]

	Federal	State	AAR	Total
Fiscal year 2000 & prior	$17,800	$8,000	$10,350	$36,150

[In thousands of dollars]

	Federal	State	AAR	Total
Fiscal year 2001	7,000	3,000	5,000	15,000
Outyears	3,200	1,000	4,650	8,850
Total	28,000	12,000	20,000	60,000

MICHIGAN PTC PROJECT

Question. Please summarize and assess the results to date of the Detroit-Chicago Corridor incremental train control system. What are the remaining technical and institutional challenges to adapting the technology to meet industry interoperability standards so that the Michigan project can integrate with the Illinois project? How does the fiscal year 2001 budget request address these challenges?

Answer. The Incremental Train Control System (ITCS) will support revenue-service high-speed operation for passenger trains on about 80 miles of the Detroit—Chicago corridor. Providing a demonstration system for this specific territory was originally proposed by the team of Michigan DOT, Amtrak, and Harmon Industries in 1995, and can be called the "baseline" system.

The controlling units, both locomotives and cab cars, of all passenger trains on the corridor are now equipped with operating ITCS units. Six Norfolk Southern freight locomotives are also equipped, to power the local freight service on the line. As of March, 2000, wayside equipment is installed on virtually the entire 80 mile zone and is operating on the first 20-mile segment. Test trains have operated at over 110 mph. The remaining tasks to accomplish full high-speed operation of the baseline system are associated with: (1) safety verification and validation of the system design and software; (2) the necessary testing to "cut in" the remaining wayside sections; and (3) initiation of the system for freight trains. All participants in the joint project are confident that the baseline system can deliver the necessary levels of safety and reliability to support revenue service, as intended. The demonstration has already shown that introducing these complex new systems is very challenging to accomplish, since they affect all aspects of railroad operations both on the demonstration segment and at the terminals, such as Chicago and Detroit, where the equipped trains originate.

The technical and institutional challenges associated with adapting the baseline system technology to industry interoperability requirements relate to the original nature of the baseline system, which utilized relatively limited computer capabilities aboard the locomotive and needed to operate on only a limited route structure consisting primarily of single track. To be more generally applicable, the system will need more capable onboard computers and improved location system capabilities to deal with multiple track routes. These technical needs can be accomplished while conforming the system to the new modular industry-standard onboard platform being developed as part of the North American Joint PTC Project for the Illinois corridor. The $3,000,000 requested by FRA in fiscal year 2001 is to adapt the ITCS system approach to the new platform and new industry standards, thereby making this approach more widely available for other developing high-speed corridors as well as for the so-far unequipped portion of the Michigan corridor.

FUNDING FOR MICHIGAN PTC PROJECT

Question. What are the funding needs of the Michigan incremental train control system (ITCS) high-speed passenger rail demonstration project during fiscal year 2001 and subsequent years? Who are the partners in this effort, and what cost-sharing agreements are in place?

Answer. FRA has requested $3 million in fiscal year 2001 to adapt the ITCS system to the developing industry standards from the North American Joint PTC project. Partners in the project are Michigan DOT, Amtrak, and Harmon Industries, which is supplying the system hardware. To date, Michigan DOT has invested over $22 million in upgrading the infrastructure in the test section to permit speeds up to 110 mph. Harmon Industries has contributed over $5 million in development efforts, and Amtrak has supplied in-kind support such as test train operations and crews as well as installation labor. New cost sharing agreements will be needed as the baseline 80-mile system is completed and the requirements of the developing industry standards and modular onboard approach are defined in the North American Joint PTC Project.

STATUS OF HSR NON-ELECTRIC LOCOMOTIVE PROJECTS

Question. Since last year, what specific progress has been made and what contracts have you signed in each of these three areas: (a) research on flywheel turbine technology; (b) development of non-electric locomotive concepts; and (c) evaluation of the potential of the recently developed locomotive car bodies at speeds of 150 miles per hour. Please state the purpose of each relevant contract along with the fiscal year 1999 and fiscal year 2000 funding amount for each contract. Please describe the progress in each of these three areas of research.

Answer. In fiscal year 1999, FRA entered into a $2.4 million Cooperative Agreement with the University of Texas Center for Electromechanics (UT–CEM) to continue the Advanced Locomotive Propulsion Systems (ALPS). An fiscal year 2000 agreement in the amount of $3.9 million is expected to be awarded shortly. In addition, FRA provided $275 thousand and $250 thousand in fiscal year 1999 and fiscal year 2000 respectively to the Naval Business center for activities in support of the ALPS program, including the load testing of the ALPS high-speed generator.

As of March 2000, fabrication of the full-scale flywheel is well underway and the assembly of the high-speed generator is nearly complete. Generator testing will begin shortly and is expected to be completed by July 2000. Design of an integrated turbine/alternator package to be installed and tested in the FRA/Bombardier High-Speed Non-Electric Passenger Demonstration Locomotive is underway. Assembly of the basic turbine-alternator components and control system will be completed by the end of fiscal year 2000. Development of controls to interface with the locomotive will take place in early fiscal year 2001 and the package will be ready for integration into the FRA/Bombardier locomotive Demonstrator by June 2001. Final assembly of the flywheel is planned for November 2000. Laboratory testing and integration of the flywheel into a platform suitable for demonstration with the Bombardier locomotive is expected to be completed by the end of fiscal year 2001.

In fiscal year 1998, FRA entered into a Cooperative Agreement with Bombardier Transit Corporation (Bombardier) to develop and demonstrate a high-speed turbine electric locomotive. A total of $10 million was provided in fiscal year 1999 ($7M) and fiscal year 2000 ($3M) for this project. These funds will be split between the existing Cooperative Agreement with Bombardier Transit Corporation and the Transportation Technology Center Inc. (TTCI) in Pueblo, Colorado, to pay for testing of the locomotive at TTC in late CY 2000 and early CY 2001. The split of the funds between these two recipients has not yet been finalized. FRA and Bombardier have shared equally in the development costs of this locomotive.

Assembly of the FRA/Bombardier High-Speed Non-Electric Passenger Demonstration Locomotive is well underway and expected to be completed by the end of April 2000. After assembly is completed, the locomotive will undergo extensive static and rolling tests and evaluation. Initial operating capability at speeds up to 90 mph is expected by late September. Extensive high-speed and operational testing will begin in late 2000 at TTC, after which the locomotive will be capable of entering revenue service demonstrations at speeds up to 150 mph.

CONSENSUS ON NON-ELECTRIC LOCOMOTIVE DESIGN

Question. How is the non-electric locomotive program developing a consensus about a common design that could serve several markets and generate sufficient demand?

Answer. The locomotive is being developed in partnership with Bombardier Transit Corporation (Bombardier), with Bombardier and FRA each funding 50 percent of the cost. FRA has conducted extensive outreach meetings to states which are potential users of the locomotive technology. Due to this substantial investment by Bombardier, they have a strong commercial interest in assuring the marketability of the design and have undertaken the marketing and outreach efforts necessary to assure that the design appeals to a broad base of potential high-speed rail customers.

STATUS OF FLYWHEEL PROJECT

Question. What is the status of and challenges facing the flywheel project, and what are the planned activities for fiscal year 2000? How many additional years will be required to complete work on the flywheel project, and how much will this cost? Please provide costs for both development and large-scale testing. What are the cost-sharing arrangements for this project? What is the likelihood that this technology will be commercialized during the next five years?

Answer. The ALPS system consists of two major elements: a high-speed gas turbine driven generator and an energy storage flywheel. The project is currently well

into the hardware fabrication of both these elements, and preparations for demonstration in the FRA/Bombardier Non-Electric Locomotive are underway.

Specifically, final assembly of the high-speed generator will be completed by April 2000, and the associated no-load and static load testing of the generator will be completed by the end of July 2000. The challenges associated with this effort are technical: having the generator rotor survive the very high rotational speeds associated with direct drive from the turbine, while simultaneously handling extremely high levels of electrical power and the resulting high temperatures in the generator components.

Design of an integrated turbine/alternator package for insertion into the Bombardier system is underway and assembly of the basic turbine-alternator components and control system will be completed by the end of fiscal year 2000. Development of controls to interface with the locomotive will take place in early fiscal year 2001 and the turbine-alternator package will be tested and ready for integration into the Bombardier High-Speed Non-Electric Locomotive by June 2001. The challenges associated with this activity include matching the new turbine-alternator package to the existing locomotive and achieving proper control of the system by adapting necessary control software.

Final assembly of the flywheel is planned for November 2000. Laboratory testing and integration of the flywheel into a platform suitable for demonstration with the Bombardier locomotive will be completed by the end of fiscal year 2001. These schedules are consistent with the current plan for demonstration of the Bombardier High-Speed Non-Electric Locomotive, allowing for demonstration of the ALPS system during fiscal year 2002. The major challenge for the flywheel effort is achieving satisfactory sustained flywheel operation despite the dynamic forces associated with a moving train.

As outlined above, the basic ALPS technologies will be completed and tested in the laboratory by the end of fiscal year 2001. Demonstration of the ALPS system can be completed during fiscal year 2002. To complete the planned activities for fiscal year 2001 and fiscal year 2002, funding of approximately $4 million per year will be required.

A significant cost share for the program was originally provided by GM–EMD, along with contributions by the State of Texas Match Pool, Honeywell International (formerly AlliedSignal), and the US Navy. From the inception of the project in 1995 through 1997, the project was cost shared by the program participants at greater than 50 percent. In 1998, Bombardier replaced GM as the locomotive integrator for the effort and cost sharing by direct ALPS participants was reduced to about 15 percent. Bombardier, however is providing 50 percent cost share for the development of the High-Speed Non-Electric Locomotive which will be used for demonstration of the ALPS system.

There is a good chance that technology developed on the ALPS program will be commercialized during the next five years. The turbine and high-speed generator package is likely to be purchased for future units of the high-speed locomotive. Successful demonstration of the benefits of the flywheel energy storage system will address two key issues concerning operation of gas turbines in the locomotive environment: the relatively poor fuel economy at partial power and turbine maintenance requirements due to thermal cycling. The ALPS system also will help the rail industry meet future exhaust emissions limits that may be difficult for diesel-electric locomotives to achieve. In addition to the locomotive propulsion applications, additional commercial and military applications of ALPS components and technology are likely because of the extremely high power capability offered for the size and weight of the system components.

TECHNICAL PROGRESS IN GRADE CROSSING HAZARD MITIGATION

Question. Please assess the technical progress made as a result of FRA's investment in grade crossing hazard mitigation technologies. How would the fiscal year 2001 proposal promote the transfer of this knowledge to potential users?

Answer. FRA's investment in grade crossing hazard mitigation technologies is now paying off on several levels. The North Carolina Sealed Corridor Project has already demonstrated enormous success employing innovative low-cost techniques to reduce driver misbehaviors, such as running around closed crossing gates, by over 80 percent. Additional demonstrations of advanced technologies are showing similar success rates. Work with New York State has produced a comprehensive approach to reducing corridor grade crossing risk despite increases in train numbers and speeds. FRA is working with California DOT on the San Joaquin corridor to apply the new methodology, as well as new laser-based mapping techniques to provide the necessary information to better assess the risks of each crossing. The fiscal year

2001 request will be used, in part, to complete evaluation and reporting activities to make these results available to additional states and corridors as they become interested in high-speed rail. In addition, FRA will continue the successful broad agency announcement (BAA) solicitation to assure that worthwhile new demonstration projects which apply the techniques can be pursued.

GRADE CROSSING HAZARD MITIGATION PROJECTS

Question. Regarding the development of grade crossing hazard mitigation technologies, please prepare a table indicating separately the status, problems, and challenges, along with the fiscal year 1999, fiscal year 2000, and planned fiscal year 2001 FRA investments for each major project in this program. Please display this information organized by subaccount, that is, mitigating grade crossing hazards, low cost, innovative technologies, and North Carolina sealed corridor initiative.

Answer. The information is contained in the following table:

FUNDING

	Fiscal year		
	1999 enacted	2000 enacted	2001 request
Mitigating Grade Crossing Hazards	$2,500,000	$2,500,000	$2,500,000
Low-Cost Innovative Technologies	1,100,000	997,000	1,100,000
Sealed Corridor Initiative	1,000,000	400,000	400,000
Total, Grade Crossing	4,600,000	3,897,000	4,000,000

STATUS

Project area	Status	Issues
Locked gate at private crossing.	Being conducted by New York DOT, underway	No significant issues.
Vehicle counting and characterizati on at crossings.	Demonstration project to be awarded shortly	The ability to characterize the types of vehicles using a crossing as well as their number greatly improves risk predication ability.
Crossing occupancy detection.	Project to adapt and evaluate an ultrasonic-based crossing occupancy detection system to be awarded shortly.	Reliable crossing occupancy detection can greatly reduce risk to both highway and rail vehicles.
Grade crossing topographical characterizati on.	Laser-mapping of crossing topography conducted on two corridors, data analysis underway.	Rapidly acquired accurate data will permit easy identification of humped crossing and those with limited sight distance or other characteristics affecting risk, allowing better targeting of risk-reduction efforts.
Locked gate at private crossing.	Being conducted by New York DOT, underway	No significant issues.
Broad Agency Announcement to solicit additional proposals in this technology area.	To be released shortly	No significant issues at this time.

STATUS—Continued

Project area	Status	Issues
NC Sealed Corridor	The second long gate arm test is complete with an 84 percent reduction in violations. Video ticketing complete with 67 percent reduction in violations. Implementation of median separators, longer gate arms and four quadrant gates at crossings between Greensboro and Charlotte continues. Five additional crossings closed since April 1999. Design and engineering has begun on 10 crossings on CSXT's portion between Raleigh and Cary. Four quadrant gates: 12 constructed, 2 authorized for construction, 6 under design, 6 in planning Median separators: 15 constructed, 3 under design Longer gate arms: 1 constructed, 17 under design, 11 auth. for const. Stop signs (temporary): 2 (to be closed in next 1–4 years) Closures: 26 completed, with plans to close 8 more in the next 2 years..	No significant issues at this time.

RESULTS OF SEALED CORRIDOR APPROACH

Question. Please assess the results thus far on the sealed corridor approach and discuss how the fiscal year 2001 budget request will continue those advances.

Answer. The Sealed Corridor approach has very successfully tested and documented the results for deploying innovative, low cost grade crossing warning and protection systems. The project has conclusively demonstrated that these very practical approaches can reduce driver misbehavior at grade crossings by 80 percent or more. The results are now being analyzed for publishing, to be used by other states and in the development of high-speed corridors. The fiscal year 2001 funding will enable the construction of enhanced crossing devices and closure efforts to be extended along the designated Southeast High-Speed Rail Corridor between Raleigh and Charlotte, and completion of the analysis and reporting activities now underway.

STATUS OF HAZARD ELIMINATION PROJECTS

Question. What is the status of each of the high speed rail corridor crossing hazard elimination projects funded in fiscal year 1999 and fiscal year 2000 under TEA–21 section 1103(c)? How much contract authority is available within the highway firewall in fiscal year 2001 under current law?

Answer. The DOT is in the process of allocating $5.25 million authorized in fiscal year 2000 according to the earmarks outlined in the Conference Report. The status of the fiscal year 1999 projects is presented in the following table and are for the funded amount of $6.95 million. A total of $5.25 million is available in fiscal year 2001.

FISCAL YEAR 1999 PROJECT STATUS

State	Amount allocated	Project status
Washington	$500,000	Close two crossings, install median barriers at 12 crossings, and support the construction of a pedestrian overpass. All projects are in preliminary engineering.
Oregon	400,000	Conduct planning and updating the national inventory ($125,000). With the balance, $275,000, fund the construction of an access road to link seven properties to a major road with a public grade crossing, and close seven private crossings. Work on this is underway.
California	250,000	Close the last ungated crossing on the San Diego line at Dana Point ($30,000), plus use $220,000 for feasibility studies and preliminary engineering for the egregiously unsafe crossing in Martinez. Preliminary engineering and environmental reviews for these projects is underway.

FISCAL YEAR 1999 PROJECT STATUS—Continued

State	Amount allocated	Project status
Wisconsin	500,000	Upgrade four crossings between Milwaukee and Chicago with new lights, gates and constant warning time devices (CWT).
Illinois	350,000	Install flashing lights, gates and CWT at two crossings and close one crossing. No action has been taken on these projects due to the need to support the Vehicle Arresting Barrier project.
Indiana	200,000	Study alternative routes for the Cincinnati-Indianapolis-Chicago corridor and to identify improvements needed and crossings for consolidation.
Michigan	500,000	Close and upgrade crossings between Kalamazoo and Grand Beach, MI near the Michigan/Indiana border. Preliminary work is underway.
Texas	125,000	Study alternative routes for the corridor, identify improvements needed and crossings for consolidation, and update the national grade crossing inventory.
Louisiana	325,000	Update the national inventory ($75,000) and upgrade one very dangerous crossing at Gentilly Road in New Orleans ($250,000). The latter is viewed as part of the known alignment that the Gulf Coast Corridor must adopt through New Orleans. Preliminary design is underway.
Mississippi	355,000	Update the national inventory ($75,000) and upgrade two grade crossings in Gulfport (rated #4 in accident prediction ranking in the state) and Long Beach (rated #7 in the state) ($280,000). Preliminary design is underway.
Alabama	345,000	Update the national inventory ($75,000) and upgrade two grade crossings ($270,000). Preliminary design is underway. Florida 300,000 Upgrade two crossings, one with four-quadrant gates and one with median gates. Preliminary design is underway.
Georgia	250,000	Fund one half of the total cost of the action plan for upgrading and consolidating all crossings in Georgia's high speed rail corridors. South Carolina 150,000 Develop the action plan for upgrading and consolidating all crossings in South Carolina's high speed rail corridors.
North Carolina	1,000,000	Realign two streets and close two crossings, install median barriers at four crossings and install long gate arms at four crossings.
Virginia	500,000	Construct grade crossing improvements and support construction of a pedestrian overpass in Prince William County to eliminate trespassing on the CSX mainline on the high-volume Richmond extension of the Northeast Corridor.
Pennsylvania	500,000	Begin design for the highway grade separation and bypass road. Design is now underway.
New York	400,000	Conduct design and preliminary engineering for grade separations, the first step needed to implement the State's grade crossing improvement plans based on safety risk analysis. Design is underway.
Total	6,950,000	

STATUS OF TRACK AND STRUCTURES TECHNOLOGY

Question. Please prepare a table indicating separately the status, problems, and challenges, along with the fiscal year 1999, fiscal year 2000, and planned fiscal year 2001 FRA funding (and other funding sources, when applicable) for each project in the track and structures technology program.

Answer.

TRACK AND STRUCTURES FUNDING

	Fiscal year		
	1999 enacted	2000 enacted	2001 request
Amount	$1,200,000	$1,200,000	$1,200,000

TRACK AND STRUCTURES STATUS AND ISSUES

Project area	Status	Issues
Risk-based scheduling of ultrasonic testing for high-speed tracks.	Underway	Potential reduction in track maintenance costs and safety improvements.
Increasing speeds through special trackwork.	Underway	Techniques to increase speeds through existing special trackwork without replacing entire units to permit higher speeds at minimal cost.
Evaluation of techniques to address subgrade failures.	3 different projects underway or to begin shortly—in service demonstration of the first to begin shortly.	Advanced techniques to stabilize weak subgrade can reduce life-cycle cost and the frequency of slow orders.
Demonstration of low-cost techniques to improve ride quality and increase speeds over areas with large stiffness variations.	Demonstrations underway	Low-cost techniques such as tie-pads and drainage improvements offer opportunities to improve ride quality and permit higher speeds at minimal cost.
Broad Agency Announcement to solicit additional proposals in this technology area.	To be released shortly	No significant issues at this time.

STATUS OF MAGLEV PROGRAM

Question. Please update the Committee on the accomplishments, results, cooperative agreements, and challenges associated with the maglev program funded under TEA–21.

Answer. FRA has made considerable progress since the enactment of TEA–21. In October, 1998, FRA published an interim final rule setting forth the procedures for the application for pre-construction planning grants by interested states or state authorities. Eleven applications were received and evaluated. On May 24, 1999, Secretary Slater announced the seven projects that would receive grants. FRA signed seven cooperative agreements providing $12.7 million in fiscal year 1999 funds and is in the process of finalizing amendments to those agreements adding $14.8 million in fiscal year 2000 funds.

Last year, FRA selected a consulting firm, MK Centennial, to monitor the planning work underway by the seven project sponsors and to provide engineering support in subsequent phases of the program. The Volpe National Transportation Systems Center is another member of the team. Volpe will prepare the Environmental Impact Statements and assist a Departmental technical evaluation panel in rating the plans and recommending the best ones.

On February 29, 2000, FRA received an Environmental Assessment from each of the seven applicants and by June 30, we expect to receive seven detailed Project Descriptions. By 2003, the Secretary will select a project as required by TEA–21. In fiscal year 2001, the President's Budget does not include funding for construction.

MAGLEV FUNDING

Question. Please prepare a summary of authorized and appropriated funding for the maglev program. What cooperative agreements have been announced, what funds have been released and to which grantees? When will the fiscal year 2000 cooperative agreements and related federal funding be announced?

Answer. Following is a summary of the fiscal year 1999 and fiscal year 2000 funding for the Maglev Deployment Program.

	Fiscal year	
	1999	2000
Contract Authority	$15,000,000	$20,000,000
Obligation Limit (percent)	88.3	87.1
Available for Obligation	$13,245,000	$17,420,000
California	$1,430,000	$1,959,750
Florida	1,400,000	1,959,750
Georgia	1,400,000	1,959,750
Louisiana	1,400,000	1,959,750
Maryland	1,300,000	1,959,750
Nevada	1,400,000	1,959,750
Pennsylvania	4,415,000	3,048,500
Subtotal	12,745,000	14,807,000
Other	499,970	871,000
Total Contract Authority	13,244,970	17,420,000

On May 24, 1999 the Secretary of Transportation announced grants to seven states and authorities for preconstruction planning. Cooperative agreements between the various selected applicants and the FRA have been executed, obligating $12.745 million in fiscal year 1999. An additional $14.8 million in fiscal year 2000 funds will be obligated in fiscal year 2000.The following lists the project sponsors, a short description of the project, and the date amendments allocating fiscal year 2000 funding were signed by the Federal Railroad Administrator. Each of the first four project sponsors were advised of the amendment to their cooperative agreement providing the additional federal funding, by a letter from the FRA Administrator at the time that the agreement was signed. The amendment to the cooperative agreement for the project in New Orleans was announced by the Secretary of Transportation on March 3, 2000. The amendments for the projects in Los Angeles and Pittsburgh have not yet been signed or announced.

—*California-Nevada Super Speed Train Commission*.—A 42-mile project linking Las Vegas to Primm, Nev.; 02/02/00.

—*Florida Department of Transportation*.—A 20-mile project linking Port Canaveral to the Space Center and the Titusville Regional Airport; 02/02/00.

—*Atlanta Regional Commission*.—First 40 miles of 110-mile project from Atlanta to Chattanooga, Tenn.; 02/15/00.

—*Maryland Department of Transportation*.—A 40-mile project linking Camden Yard in Baltimore and Baltimore-Washington International Airport to Union Station in Washington, D.C.; 2/15/00.

—*Greater New Orleans Expressway Commission*.—A 40-mile project linking New Orleans Union Passenger Terminal to the airport and across Lake Pontchartrain to the fast-growing northern suburbs; 03/02/00.

—*State of California*.—A 70- to 75-mile system connecting Los Angeles International Airport to Union Station in downtown Los Angeles to Ontario Airport and further east into Riverside County; Pending signature by FRA.

—*Port Authority of Allegheny County*.—A 45-mile project linking Pittsburgh Airport to Pittsburgh and its eastern suburbs; Pending negotiation of a Scope of Work.

MAGLEV ADMINISTRATIVE COSTS

Question. How much of the contract authority for the maglev program in the fiscal year 2001 budget request will be used for administrative needs? Please break out these costs.

Answer. A total of $3.5 million has been earmarked for administrative expenses. Of this amount, $2M will provide contract support for the maglev program. The remaining balance of $1.5million will support other FRA administrative expenses.

FISCAL YEAR 2000–2001 NDGPS FUNDS

Question. In fiscal year 2000, $5,000,000 was provided for the NDGPS program from Federal Highway Administration administrative expenses funds. For fiscal year 2001, the budget requests $18,700,000 from FHWA research and technology program funds. Who will administer both the fiscal year 2000 and fiscal year 2001 funds? Please break out in detail both how the fiscal year 2000 funds are being spent (categorize capital and operating expenses), and how the requested fiscal year 2001 funds would be spent.

Answer. Both the fiscal year 2000 and fiscal year 2001 funds will be administered by the United States Coast Guard. Fiscal year 2000 funds are being spent as follows: $1.8 million for capital costs, and $3.2 million for operating expenses. The requested fiscal year 2001 funds would be spent as follows: $13.2 million for capital costs, and $5.5 million for operating expenses.

INCREASE IN FISCAL YEAR 2001 NDGPS COSTS

Question. Why is the request for fiscal year 2001 ($18.7 million) so much higher than the level requested in fiscal year 2000 ($10.4 million)? Is $5.4 million of the request meant to make up the shortfall between last year's request and subsequent appropriation?

Answer. The request for $18.7 million in fiscal year 2001 is based on FRA's plan to install 28 NDGPS sites in fiscal year 2001. This is the same amount submitted in last year's funding summary for fiscal year 2001, despite the fact that the funding requested for fiscal year 2000 was subsequently cut by more than half from $10.4 million to $5 million. Now that all of the Air Force Ground Wave Emergency Network (GWEN) towers, equipment, and real estate have been conveyed from the Air Force to the Coast Guard, the Coast Guard is obligated to pay the costs of leasing and maintaining the sites, even where they are not yet converted to NDGPS sites. Any funding limitations on the conversion efforts results in the federal government paying the lease and maintenance costs without receiving the benefits of operation.

NDGPS FUNDING HISTORY

Question. Please update the Committee on the status of the nationwide differential global positioning system and FRA's role in that initiative. Provide a funding history to date, as well as a 5-year schedule of benchmarks, anticipated costs, and anticipated funding sources (please specify which DOT or other federal agencies will be providing funds).

Answer. On March 15, 1999, the Secretary of Transportation and the Commandant of the U.S. Coast Guard announced Full Operational Capability of the Maritime DGPS Service, which provides differential coverage along the coasts, the Great Lakes, and the Mississippi River. At the same time, the Secretary and the Commandant announced the expansion of that Service into a Nationwide DGPS (NDGPS) with the addition of eight operational inland GWEN sites. FRA's role in this initiative is to request funding for NDGPS because the Secretary of Transportation delegated his authority to the FRA to determine the Federal requirements for the NDGPS. A Memorandum of Agreement among the Office of the Secretary, FHWA, FRA, and the Coast Guard gave to FRA, the responsibility to submit and defend funding requests for implementation, operation, and maintenance of the NDGPS. FRA was given this responsibility because railroads especially need a continuous, uniform, accurate, high-quality radionavigation signal for new Positive Train Control systems. The funds are transferred to the Coast Guard which is responsible for the actual construction, operation, and maintenance of the NDGPS.

The NDGPS project will take 5 years to complete (1998–2002) at an estimated cost of $37.1 million in capital funding. Once fully implemented, the system is estimated to cost approximately $6.9 million per year to operate and maintain. The allocation of Capital and Operating costs by fiscal year is detailed in the table below:

[In millions of dollars]

Fiscal year	Capital costs	Operating costs
1998	[1] 2.4	

[In millions of dollars]

Fiscal year	Capital costs	Operating costs
1999	[1] 5.5	.....
2000	[1] 1.8	[1] 3.2
2001	[2] 13.2	[2] 5.5
2002 & Beyond	[3] 14.2	[3] 6.9
Total Capital & Annual Costs	[3] 37.1	[4] 6.9

[1] Appropriated.
[2] Requested.
[3] Estimated.
[4] Annual Estimate.

Based on the funding made available in the fiscal year 1998–1999, nine GWEN sites, including one that was converted at Macon, Georgia on March 17, 2000, have been integrated into the NDGPS. The fiscal year 2000 funding phase of this five-year project will expand the NDGPS by an additional 14 transmitting sites by the end of calendar year 2000, and complete the NDGPS Master Control Station installations at Alexandria, Virginia, and Petaluma, California. The estimated cost avoidance to the government resulting from the reuse of GWEN property and equipment is $16 million. The current plan is for the establishment of an additional 28 sites in fiscal year 2001, and 16 sites in fiscal year 2002, for a total of 67 NDGPS stations. As required by Public Law105–66, Section 346, the new sites will all be integrated into the Continuously Operating Reference Station (CORS) and Precipitable Water Vapor System (PWVS) networks operated by the U.S. Department of Commerce.

NON-DOT AGENCIES INTEREST IN NDGPS

Question. Seven federal agencies are signatories to a memorandum of agreement which outlines the federal governments commitment to the establishment and long-term operation, management, and maintenance of the NDGPS. Three of these agencies are not Department of Transportation: the National Oceanic and Atmospheric Administration, the U.S. Army Corps of Engineers, and the U.S. Air Force. Please summarize each of these agencies interest in NDGPS technology, describe benefits that accrue to the agency's activities, and the level of financial or other support that each agency has contributed or is planning to contribute to NDGPS establishment, operation, management and maintenance. What level of funding is requested for the support of NDGPS in fiscal year 2001 budget requests other than the Federal Highway Administration?

Answer. The National Oceanic and Atmospheric Administration will integrate each NDGPS reference station into Continuously Operating Reference Station (CORS) system and will add Integrated Precipitable Water Vapor System equipment to NDGPS. The U.S. Army Corps of Engineers will provide real estate services and property management services to the NDGPS program including, but not limited to, real property, planning, appraisal, acquisition, leasing, management, engineering, design, environmental assessment, and construction management. The U.S. Air Force is transferring decommissioned Ground Wave Emergency Network (GWEN) sites and spare hardware to the Department of Transportation for use as NDGPS reference stations. For more details, the interest of these agencies in NDGPS technology and the benefits that accrue to their activities were described in a report to the House and Senate Committees on Appropriations titled "The Department of Transportation on Civilian Use of the Global Positioning System (GPS): The Nationwide Differential Global Positioning System and Additional Civilian GPS Signals," submitted on July 1, 1999, by the Federal Railroad Administration in cooperation with the Office of the Secretary of Transportation, the Federal Aviation Administration, the Federal Highway Administration, and the United States Coast Guard.

The Department of Transportation is the only department requesting funding for NDGPS. The seven signatory Agencies agreed that FRA/DOT should be the program sponsor responsible for requesting funding. As noted above, every participating Agency is contributing resources, in staff or in-kind, for this project.

NON-DOT FINANCIAL SUPPORT FOR NDGPS

Question. The Committee has expressed its concern that "DGPS-related expenses should not be derived solely from the Federal highway trust fund or other DOT ac-

counts." (Senate report 106–55, p. 101). How has the administration responded to this concern?

Answer. The seven signatory Agencies are providing support for this project either through staffing, equipment or other in-kind services. In addition, FRA described in some detail in a report submitted to Congress on July 1, 1999, the significant contributions that the other Agencies have made and continue to make to the establishment of NDGPS. Unfortunately, the report was delivered after the Senate Report was published.

The Department has proposed cost sharing from other Agencies; however, the task group agreed that FRA/DOT should be the program sponsor responsible for requesting funding since this is a transportation navigational system. Further, it is believed that cost sharing a relatively small project through seven Departments, and many more Congressional Committees, only to transfer the funds back to the Department of Transportation is counterproductive, increases administrative costs and reflects government at its worst.

NDGPS AND PTC

Question. How is the NDGPS program being integrated with positive train control efforts already underway?

Answer. All modes of transportation need precise positioning information. This information must be in real time and must be accurate to permit safe control of vehicles—trains, ships, aircraft, trucks, automobiles, transit, and emergency response. Intelligent Transportation Systems are being designed to incorporate precise positioning information. Coverage and integrity are important attributes of a positioning system.

Over a 7-year period, railroads experienced at least 876 collisions and other accidents, which fully-implemented communications-based positive train control (PTC) systems would likely have prevented. In fact, the National Transportation Safety Board has listed PTC as one of its "ten most-wanted" initiatives for national transportation safety. FRA is facilitating the deployment of PTC within the railroad industry by completing the installation of a Nationwide Differential Global Positioning System (NDGPS) network, which FRA and several railroads have determined to be a prerequisite for PTC.

In July, 1994, FRA published a report to Congress, entitled Railroad Communications and Train Control, as required by the Rail Safety Enforcement and Review Act. In that report, FRA outlined an action plan and time line to advance PTC deployment by the end of the century. FRA indicated that in fiscal year 1997 it would commence rulemaking regarding the installation PTC on identified railroad corridors. That rulemaking has begun and is taking place under the auspices of the Railroad Safety Advisory Committee.

In June, 1995, FRA published another report to Congress, entitled Differential GPS: An Aid to Positive Train Control, in response to a request from the Senate and House Appropriations Committees. It concluded that if the Coast Guard's DGPS service were expanded nationwide, it could satisfy the location determination system requirements for PTC systems. Full nationwide deployment of the Coast Guard DGPS network would significantly aid the development and deployment of PTC systems by providing an affordable, uniform, continuous, accurate, reliable, secure, real-time location determination system throughout the United States. PTC systems that would use positioning information from the NDGPS are being installed in Alaska, Illinois, Michigan, South Carolina, and Georgia, and are being considered in other areas of the country because of the need to handle growing railroad freight, intermodal, intercity passenger, and commuter rail traffic at higher levels of safety.

IMPACT OF REDUCING NDGPS SITES IN 2001

Question. Please discuss whether it is critical to PTC deployment to fund the additional 28 NDGPS stations next year. What are the safety implications of only funding half of these this year?

Answer. On December 8, 1998, the Federal Railroad Administrator determined that, "The FRA has an operational requirement for NDGPS in the continental United States and Alaska to support Positive Train Control for railroads." What is most critical to PTC deployment is not so much the funding of 28 or some other specific number of NDGPS stations next year, but that the project be completed no later than fiscal year 2002 so that the investments to date are not wasted, the ultimate costs are not increased, and the safety and economic benefits (to railroads and a myriad of other users) are not lost. A delay in nationwide coverage adversely impacts on FRA's ability to issue a nationwide PTC rule.

STATUS OF RRIF RULE

Question. TEA–21 expanded the Railroad Rehabilitation and Improvement Financing program to permit non-federal entities to provide the subsidy budget authority needed to support a loan through the payment of a credit risk premium. Has a final rulemaking been issued which outlines the structure of the expanded loan program? Is FRA aware of industry and commercial interest in utilizing this expanded loan program?

Answer. A Final Rule, has been drafted and is currently in the clearance process. The 92 comments received in response to the Notice of Proposed Rulemaking reflected a wide range of interest in the program. Of the comments received, 57 small railroads indicated an interest in participating in the program. A total of 13 State Departments of Transportation wrote of the need for the program. In fact, Iowa and Washington are considering requesting state appropriations for the payment of credit risk premiums, required pursuant to the Credit Reform Act of 1990.

RHODE ISLAND AUTHORIZATION

Question. Please cite the current authorization for the Rhode Island Rail development improvement project, including the date enacted.

Answer. The authorization for the Rhode Island Rail Development Project is Section 9 of the "Water Resources Development Act of 1999-Technical Corrections" (Public Law 106–109). It was enacted on November 24, 1999.

RHODE ISLAND FUNDING

Question. Between fiscal years 1995 and 2000, the Rhode Island rail development project has received $38,000,000 in federal appropriations. What level of funding remains unobligated?

Answer. A total of $28 million was available through fiscal year 1999 and all the funds have been obligated. The $10 million provided in fiscal year 2000 will be obligated by year-end.

STATUS OF RHODE ISLAND CONSTRUCTION

Question. Construction of 5 miles of Track 7 replacement track was scheduled to begin in April 1999 and continue for 15 months. Did this construction begin on schedule? When is it scheduled to be completed?

Answer. Beginning nearly a year ago, Rhode Island DOT (RIDOT) undertook a comprehensive review of construction cost estimates to complete the Freight Rail Improvement Project. It was evident from this analysis that building vital sections of a new third track and increasing clearances at bridges were likely to cost more than had earlier been estimated. Because track 7 is currently in service, RIDOT decided to postpone upgrades until work on the more important new tracks and bridge clearances was complete. Track 7 will now be upgraded near the end of the Project—mid-2001—when other, more vital work is well underway and all costs are known. The exact scope of work on Track 7 will be determined by the available budget at the time.

STATUS OF THIRD TRACK CONSTRUCTION

Question. Is Third Track construction scheduled to begin in April 2000 and continue for 18 months, as outlined in last year's hearing record? If not, why not?

Answer. Work on the third track has been delayed due to time spent on the review of cost estimates and work on completing the NEC electrified high-speed operations (Amtrak is RIDOT's primary construction contractor.)

Amtrak has nearly completed all construction related to electrified, high-speed operations and is now available for RIDOT construction. A master schedule prepared by Rhode Island DOT's Freight Rail Improvement Project office in early February 2000 shows third track construction beginning late this calendar year.

STATUS OF BRIDGE CONSTRUCTION

Question. Have any bridge construction package contracts been awarded? If so, which ones, and what are their schedules? Is the project on track for construction of bridge construction packages to be completed by summer of 2001, with high and wide operations commencing in fall of 2001? If there have been setbacks to this anticipated schedule, please outline the challenges and what steps Rhode Island DOT and the FRA intend to take to complete the project within budget and on, or close to, schedule.

Answer. No bridge construction contracts have been awarded. The first, jacking of the Rocky Hollow bridge, is scheduled to be awarded this summer with a construction "notice to proceed" issued by late August. The last, Dexter Street bridge jacking, is being deferred as part of the Track 7 decision. Two bridges, Hunt's River and Cranston Street, will be improved using highway funds. All construction schedules have been impacted by the comprehensive review of construction cost estimates. This exercise was extremely important to the ultimate success of this project because it addressed potential cost overruns at the start of the process, eliminated non-critical scope in order to free up funds to insure that the most essential improvements are funded, and rescheduled certain less critical work to the end of the project when the actual amount of remaining funds will be known and assigned without fear of budget shortfalls. FRA and RIDOT will monitor actual construction costs very closely and be in a position to adjust scope and schedule so that a useable product that meets the goal of accommodating high and wide loads will result.

IMPACT OF SPLIT FUNDING RHODE ISLAND PROJECT

Question. What would the affect be of appropriating the remaining $17 million of federal commitment total into two equal appropriations of $8,500,000 in fiscal year 2001 and $8,500,000 in fiscal year 2002?

Answer. All construction packages are currently scheduled to be awarded by Spring 2001. A delay of twelve months in the appropriation of $8,500,000 will push the last of these awards into 2002. Not only would this end up increasing project costs, but also force significant changes to construction schedules which have been coordinated with Amtrak, the owner and operator of the adjacent Northeast Corridor high-speed tracks, and RIDOT's prime construction contractor. Amtrak is unlikely to support disruptions to its high-speed service, which is a key source of revenue to eliminate its need for operating subsidy.

CURRENT COST ESTIMATE OF PENNSYLVANIA STATION PROJECT

Question. What is the current cost estimate for the Pennsylvania Station project? How have the project cost estimates increased since this project was first funded in fiscal year 1995? What is the level of federal "commitment" to this project? What legal form does this commitment take?

Answer. The current cost estimate for the Pennsylvania Station Redevelopment Project is $788 million. The increase in cost, since fiscal year 1995, is attributable to: additional project scope including an expanded West End concourse with a new commuter level concourse, an intermodal ticketing hall, improved loading facilities for the United States Postal Service (USPS), increased retail area; the addition of passenger handling facilities for airport access; lease payments to USPS, including the cost of Amtrak force account; USPS construction costs; financing costs; and contingency costs. The direct Federal funding commitment is $348 million of which $128 million was previously appropriated funds, $60 million was provided in advance appropriations beginning in fiscal year 2001 and $160 million provided in Transportation Infrastructure Finance and Innovation Act credit assistance. In addition, the Pennsylvania Station Redevelopment Corporation expects to receive certain Federal funds apportioned to the State of New York, including $20 million from the Surface Transportation Program and $64 million from the Congestion Mitigation and Air Quality Program. To date, the Federal Railroad Administration has entered into grant agreements with Amtrak totaling $48 million and the Pennsylvania Station Redevelopment Corporation totaling $29 million in previously appropriated funds. In addition, Amtrak has invested $20 million of its capital funds in Pennsylvania Station life safety improvements.

FEDERAL SUPPORT FOR PENN STATION PROJECT

Question. Please detail all federal appropriations and other federal funding(e.g. authorizations that carry contract authority, TIFIA) to the Pennsylvania Station project to date? What level of federal funding remains unobligated?

Answer. A detailed list of federal appropriations and other federal funding to the Pennsylvania Station project follows:

[In millions of dollars]

Fiscal Year 1994 Supplemental Appropriations Act	10.00
Fiscal Year 1995 Supplemental Appropriations Act	21.50
Fiscal Year 1996 DOT Appropriations Act	9.00
National Highway System Designation Act	24.75
Taxpayer Relief Act	11.00

Fiscal Year 1998 DOT Appropriations Act	12.00
Transportation Equity Act for the 21st Century	40.00
Transportation Infrastructure Finance and Innovation Act	160.00
Fiscal Year 2001 Advance Appropriations	60.00
Total	348.25

Note: A total of $91 million remains unobligated.

PROJECT BUDGET FOR PENN STATION

Question. Please provide a project budget that outlines all sources of funding, whether these funds are on hand or planned, what amount of funding in each category has been obligated to date, construction schedule milestones, and date of completion.

Answer. The project budget and sources of funding for the Pennsylvania Station Redevelopment Project follows:

Project Budget

[In millions of dollars]

Construction and contingencies	573
Financing and reserves	109
Professional services (architectural/engineering, risk management and development manager)	68
Lease costs	20
Administrative and consultants	18
Total	788

Sources of Funds

[In millions of dollars]

Federal funding to Amtrak	[1] 68
Federal funding to PSRC	56—[1] 29
Advance Federal appropriation	[2] 60
Transportation Infrastructure Finance and Innovation Act	[3] 160
New York State Department of Transportation:	
Congestion Mitigation and Air Quality	[4] 64
Surface Transportation Program	20—[1] 10
State Multi-modal	[4] 20
Metropolitan Transportation Authority	[3] 35
New York City Economic Development Corporation	[1] 25
United States Postal Service	[4] 125
New York State Urban Development Corporation	[3] 155
Total	788

[1] Obligated.
[2] Appropriated.
[3] Planned.
[4] Committed.

It is expected that the Pennsylvania Station Redevelopment Project will begin construction in the fall of 2000 with a construction period of approximately 48 months. The West End Concourse is expected to be opened for pedestrian traffic by December 2003, with substantial completion of the station by December 2004.

PENN STATION—RENOVATION VS LIFE SAFETY REPAIRS

Question. Amtrak recently released a report to Congress on the planned infrastructure improvements to the South End of its Northeast Corridor (Washington, D.C. to New York City). Life safety improvements to the tunnels below Pennsylvania Station in New York City are estimated to cost more than $300 million over the next ten years or so. In FRA's budget, $20 million is requested—and was already funded as an advance appropriation in fiscal year 2000—for the Penn Station Redevelopment Project. Will any of the $20 million in the administration's budget for Penn Station be used for life safety improvements to the tunnels? Please justify the administration's decision to place a higher priority on funding the renovation of a building (much of which will be for commercial use), than on funding life safety repairs and improvements. How will the needed tunnel repairs and improvements be paid for?

Answer. Both the upgrade of passenger related facilities at Pennsylvania Station (Penn Station) and safety improvements to the six tunnels providing access to Penn Station from New Jersey and Long Island are necessary for the long term vitality of all passenger rail service, commuter as well as intercity serving New York City. Both initiatives share important attributes. They address the need to invest in aging infrastructure and they require partnerships at the Federal, state and local level. The Pennsylvania Station Redevelopment Project (Project) includes fire and life safety improvements to the portion of the tunnels beneath Penn Station and the James A. Farley Post Office building (Farley building). The $20 million funded by the Congress as an advance appropriation for fiscal year 2001 is not specifically targeted for improvements to the tunnels. However, a total of approximately $54 million in life safety improvements below Penn Station and the Farley building are included in the Project plan. The need to invest in Penn Station is well documented, including the inadequacies of the existing facility in terms of the safety of egress and the inability to create any additional capacity through the construction of new tracks and platforms. If the region's transportation and environmental needs are to be met, then the existing facilities must be expanded now. The Pennsylvania Station Redevelopment Corporation is endeavoring to do so through its innovative design for combining parts of the Farley building with the existing Penn Station.

Upgrading the rail passenger tunnels accessing New York Penn Station is vital to the long-term future of all rail passenger service in the Northeast. The Department as well as Amtrak, New Jersey Transit (NJT) and the Long Island Rail Road (LIRR) are mindful of the need to upgrade the tunnels. Since 1976, a total of $106 million has been invested in their upgrade by Amtrak and its partners and another $43 million will be invested in fiscal year 2000. Amtrak is also working with NJT and LIRR to prioritize long-term tunnel improvement investments and to develop an appropriate mechanism for allocating the resulting costs which reflects Amtrak's ownership but minority use of the tunnels.

CAPITAL GRANTS TO AMTRAK

Question. Please provide a funding history, by fiscal year, of Amtrak's federal appropriations and other federal funds from the Corporation's creation to present.

Answer. The information of Amtrak's Federal appropriations including the Northeast Corridor Program follows:

Amtrak Federal Appropriations Including the Northeast Corridor Program

[In millions of current dollars]

Fiscal year	*Amount*
1971	40.0
1972	170.0
1973	9.1
1974	140.0
1975	276.5
1976	659.1
1977	800.7
1978	1,116.0
1979	1,234.0
1980	1,223.4
1981	1,246.3
1982	905.0
1983	895.0
1984	816.4
1985	711.6
1986	602.7
1987	624.0
1988	607.5
1989	603.6
1990	629.1
1991	815.1
1992	856.0
1993	891.1
1994	908.7
1995	972.0
1996	750.0
1997	843.0
1998	594.0
1999	609.2

Fiscal year	*Amount*
2000	571.0
Total	21,120.1

AMTRAK'S YEAR-END NET OPERATING LOSSES

Question. Please provide a table displaying Amtrak's net end-of-year operating losses, by fiscal year, from the Corporation's creation to present.

Answer. Amtrak's net end-of-year operating losses by fiscal year are as follows:

[In millions of dollars]

Year	*Net Operating Loss*
1971 (Year end 12/31)	92
1972 (Year end 12/31)	151
1973 (Year end 12/31)	159
1974 (Year end 12/31)	273
1975 (Year end 12/31)	353
1976 (Year end 9/30)	343
1977 (Year end 9/30)	537
1978 (Year end 9/30)	582
1979 (Year end 9/30)	620
1980 (Year end 9/30)	27
1981 (Year end 9/30)	179
1980–1981 Adjustment	[1] 41
1982 (Year end 9/30)	795
1983 (Year end 9/30)	805
1984 (Year end 9/30)	763
1985 (Year end 9/30)	774
1986 (Year end 9/30)	702
1987 (Year end 9/30)	699
1988 (Year end 9/30)	650
1989 (Year end 9/30)	665
1990 (Year end 9/30)	703
1991 (Year end 9/30)	722
1992 (Year end 9/30)	712
1993 (Year end 9/30)	731
1994 (Year end 9/30)	[2] 1,077
1995 (Year end 9/30)	808
1996 (Year end 9/30)	764
1997 (Year end 9/30)	762
1998 (Year end 9/30)	[3] 353
1999 (Year end) 9/30)	702

[1] This adjustment was due to a change in Amtrak's method of accounting for track structure depreciation which had the effect of increasing net losses for fiscal year 1983, 1982, and 1980–81 by $35 million, $24 million and $41 million, respectively.

[2] Includes $244 million of one-time expenses.

[3] Offset of $577 million of TRA receipts, including interest earned.

GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION

Question. Please provide a table displaying Amtrak's net end-of-year debt load, by fiscal year, from the Corporation's creation to present.

Answer. Amtrak's net end-of-year debt loads by fiscal year are as follows:

[In millions of dollars]

Fiscal year	Federal debt					Grand total paid-in capital items [3]
	Less non-Federal loan		NECIP/NHRIP funding [2]	Grand capital	Total	
	Debt	Guarantees [1]				
1971	0.7	25.0		25.0	25.7	25.7
1972	7.1	7.1			7.1	7.1
1973	30.9	78.6		78.6	109.5	109.5
1974	76.6	220.9		220.9	297.5	297.5
1975	107.1	377.8	377.8	484.9	484.9	
1976	232.7	533.3		533.3	766.0	766.0

[In millions of dollars]

Fiscal year	Federal debt					Grand total paid-in capital items [3]
	Less non-Federal loan		NECIP/NHRIP funding [2]	Grand capital	Total	
	Debt	Guarantees [1]				
1977	212.8	492.6	89.0	581.6	794.4	794.4
1978	189.9	472.2	267.8	740.0	929.9	929.9
1979	113.3	374.0	485.3	859.3	972.6	972.6
1980	99.3	445.0	698.7	1,143.7	1,243.0	1,243.0
1981	78.9	731.2	940.8	1,672.0	1,750.9	1,750.9
1982	68.7	811.6	1,311.8	2,123.4	2,192.1	2,192.1
1983	6.5	880.0	1,618.3	2,498.3	2,504.8	2,504.8
1984	13.2	1,119.6	1,871.8	2,991.4	3,004.6	3,004.6
1985	22.2	1,119.6	2,043.7	3,163.3	3,185.5	3,185.5
1986	23.8	1,119.6	2,128.8	3,248.4	3,272.2	3,272.2
1987 [1]	22.7	*1,119.6*	*2,220.6*	*3,340.2*	3,362.9	22.7
1988	35.9	*1,119.6*	*2,271.1*	*3,390.7*	3,426.6	35.9
1989	126.5	*1,119.6*	*2,310.5*	*3,430.1*	3,556.6	126.5
1990	183.8	*1,119.6*	*2,334.1*	*3,453.7*	3,637.5	183.8
1991	288.0	*1,119.6*	*2,370.0*	*3,489.6*	3,777.6	288.0
1992	418.8	*1,119.6*	*2,550.8*	*3,670.4*	4,089.2	418.8
1993	492.3	*1,119.6*	*2,673.9*	*3,793.5*	4,285.8	492.3
1994	770.3	*1,119.6*	*2,787.6*	*3,907.2*	4,677.5	770.3
1995	837.0	*1,119.6*	*2,906.9*	*4,026.5*	4,863.5	837.0
1996	987.0	*1,119.6*	*3,154.3*	*4,273.9*	5,260.9	987.0
1997	1,336.4	*1,119.6*	*3,563.4*	*4,683.0*	6,019.4	1,336.4
1998	1,637.9	*1,119.6*	*4,012.0*	*5,131.6*	6,769.5	1,637.9
1999	1,887.2	*1,119.6*	*4,046.4*	*5,166.0*	7,053.2	1,877.2

[1] Note in the amount of $1,119.6 million was signed on October 5, 1983 in return for FRA payment of Loan Guarantees. At that time, $238.7 million of deferred interest was also folded into this note. Note comes due November 1, 2082 and is secured by Amtrak rolling stock.

[2] These are borrowings under NECIP/NHRIP fundings.

[3] Amounts in this column reconcile to Amtrak's Annual Reports.

[4] Beginning fiscal year 1988 (with fiscal year 1987 restated for comparability), federal debt was reclassified as ''federal paid-in capital (in italics)'' for financial reporting purposes.

LOANS TO AMTRAK

Question. Please list the loans made to Amtrak in fiscal year 1999 and thus far in fiscal year 2000 (through February 29). Please include information on the lending institution, amount of loan, repayment period, and interest rate.

Answer. The list of loans made by Amtrak during fiscal year 1999 and fiscal year 2000 is as follows:

[Dollars in millions]

Lender/lessor	Description	Amount	Term (years)	Interest rate (per year)
Fiscal year 1999:				
Export Development Corp. & MBK Rail Finance Corporation (of Japan).	High-speed trainsets (additional draws).	164.1	20	LIBOR (6 mos) Plus 75 bp.
Export Development Corp. & MBK Rail Finance Corporation (of Japan).	High-speed trainsets (additional draws).	64.0	20	LIBOR (6 mos) Plus 75 bp.
First Union National Bank Capital Lease	(19 F–59 locomotives)	42.8	20	5.6 percent.
Wabash National Finance	Capital Lease	.1	20	6.0 percent.
Corporation	(4 inter-bogies)			
New York Air Brake Corporation	Capital Lease (5 simulators).	1.0	5	4.3 percent.
The Fuji Bank, LTD and MBK Finance Corp. (of Japan).	AEM–7 Rebuild (additional draws).	10.7	3	LIBOR (6 mos) Plus 110 bp.
Wabash National Finance Corporation	Capital Lease (173 Road Railers & Equipment).	8.1	9	6.0 percent

[Dollars in millions]

Lender/lessor	Description	Amount	Term (years)	Interest rate (per year)
Kreditanstalt fur Wiederaufbau und Bayerische Landesbank.	Richmond Static Frequency Converter (additional draws).	10.9	15	LIBOR (6 mos) Plus 110 bp.
Fiscal year 2000 (thru February 29, 2000):				
Wabash National Finance Corporation	Capital Lease (173 Road Railers & Equipment).	5.0	9	6.0 percent
The Fuji Bank, LTD and MBK Rail Finance Corp. (of Japan).	AEM–7 Rebuild (additional draws).	4.5	3	LIBOR (6 mos) Plus 110 bp.
Kreditanstalt fur Wiederaufbau und Bayerische Landes bank.	Richmond Static Frequency Converters (additional draws).	5.5	15	LIBOR (6 mos) Plus 110 bp.
Export Development Corp. & MBK Rail Finance Corporation (of Japan).	High-speed Trainsets (additional draws).	39.6	15	LIBOR (6 mos) Plus 75 bp.
Export Development Corp. & MBK Rail Finance Corporation (of Japan).	High-speed Trainsets (additional draws).	1.8	20	LIBOR (6 mos) Plus 75 bp.

FISCAL YEAR 2001 FUNDING WITH EXPANDED DEFINITION

Question. If the Federal Transit Administration's expanded capital definition were applied to Amtrak capital, what is the maximum amount of the $521,000,000 in fiscal year 2001 request that could be used for: maintenance of equipment, maintenance of facilities and maintenance of way?

Answer. Amtrak's business plan projects that it will use the expanded capital definition to fund approximately $242 million of maintenance of equipment, maintenance of facilities and maintenance of way expenses from the capital grant that would otherwise be funded from operating revenues.

DOT VS. ARC BUDGET REQUEST

Question. What was the funding request sent to OMB for the Amtrak Reform Council? What is the ARC's own request for funds in fiscal year 2001.

Answer. The ARC proposed a request of $1.4 million to OMB.

AMTRAK REFORM COUNCIL STAFFING

Question. How many full time staff are currently at the Amtrak Reform Council? How many staff are represented in the funding level requested in the 2001 budget? Are the costs associated with the 2000 and 2001 cost of living increases (4.4 percent and 4.5 percent respectively) reflected in the budget request? Is there any provision for locality pay and benefit adjustments?

Answer. The Amtrak Reform Council is an independent agency. The Department has no role in developing, reviewing, or approving their budget requests or staffing plans. Questions such as this should be directed to the Council. To the best of our knowledge, the Amtrak Reform Council has five employees on board. The fiscal year 2001 budget includes funding for 5 positions. Cost of living expenses for fiscal years 2000 and 2001 are reflected in the budget request, as well as the locality pay and benefit adjustments.

AMTRAK REFORM COUNCIL SUPPORT COSTS

Question. What level of funding is assumed in the request for travel and meeting costs?

Answer. A total of $980,000 is requested in fiscal year 2001 for the Amtrak Reform Council (ARC); of which $32,000 is for travel. We do not know how much is for meeting costs. This question should be directed to the ARC.

QUESTIONS SUBMITTED TO THE FEDERAL TRANSIT ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

TEA–21 PROGRAM GUARANTEES

Question. Do any of your fiscal year 2001 transit program budget requests differ from the guaranteed levels in TEA–21? If so, please outline the guaranteed program

funding levels, and show the proposed increase request. Why has the administration requested increased funding levels in these programs?

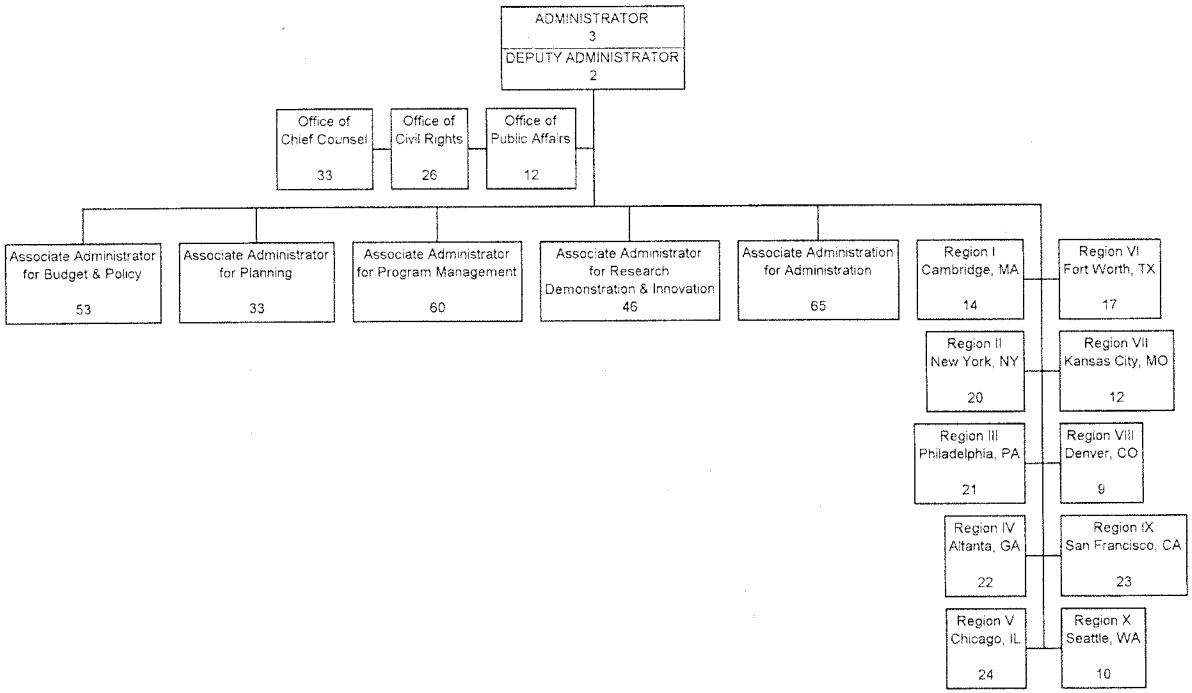
Answer. The only program FTA requests above the TEA–21 Guaranteed level is the Job Access and Reverse Commute Program. For this program FTA requests the full authorized level of $150 million. The guaranteed level for this program in fiscal year 2001 is $100 million, therefore FTA requests $50 million in addition to fully fund the program. The administration requests these additional funds as part of the redistribution of realigned budget authority (RABA) made available under the Federal-aid Highway program. This program is a priority of the administration and is critical to the success of Welfare Reform.

ADMINISTRATIVE EXPENSES

Question. Please prepare an organizational chart for the Federal Transit Administration, showing the office structure and regional office locations, as well as the current number of FTEs currently assigned to each office.

Answer. The following table provides current Federal Transit Administration organizational chart information:

FEDERAL TRANSIT ADMINISTRATION
Authorized Statistics



Question. Please break out Administrative Expenses by activity and sub-activity. Prepare a table showing fiscal year 1999 funding for each activity, fiscal year 2000 funding estimated, and fiscal year 2001 funding request.

Answer. The following chart shows fiscal year 1999, fiscal year 2000 and fiscal year 2001 Administrative Expenses by activity/sub-activity:

FEDERAL TRANSIT ADMINISTRATION—ADMINISTRATIVE EXPENSES

[In thousands of dollars]

Activity/sub-activity	Fiscal year		
	1999 actual	2000 estimate	2001 request
Salary & Benefits:			
Salary	32,040	34,244	36,499
Benefits	6,263	7,296	7,787
Travel and Transportation	1,268	1,378	1,697
Rent	3,659	3,955	4,321
Communications	1,389	1,923	2,044
Printing & Reproduction	362	365	366
Contractual Services:			
Audit and Financial Reviews Services	.....	1,500	1,000
Building management /Services	1,336	1,065	1,129
Contractor Support (Service, Help Desk,etc.)	1,000	1,700	1,724
Accounting System (DELPHI)	.....	200	303
Financial Systems (DAFIS)	477	753	761
Grant Systems/TEAM(Includes Y2K and training)	2,500	2,493	2,675
PDD63	.....	300	550
Data Warehousing	.....	.....	150
Electronic Commerce	.....	.....	150
Training/Workforce Planning	325	580	1,066
Other Contractual Services	1,387	622	654
Supplies & Materials	193	202	209
Equipment & Furniture	1,139	986	915
Total	53,338	59,562	64,000

TRAINING AND DEVELOPMENT

Question. Please specify what employee development activities have been accomplished in fiscal years 1999 and thus far in fiscal year 2000. How has FTA paid for these activities? What planned activities would be undertaken with the additional $347,000 for employment training and development? What is the base enacted funding level for this activity?

Answer. The Department's Learning and Development, workforce planning, and flagship initiatives require the obligation of funds for a variety of training courses to be offered to all employees throughout the fiscal year. These learning and development activities keep employees abreast of new developments in their fields and enhance their knowledge and skills in the areas of transportation. Key management training includes; supervisory; leadership development, interpersonal skills, oral and written communication skills, and information technology. Listed below are employee development activities that were accomplished in fiscal year 1999 and fiscal year 2000 courses for which contracts have been awarded, or employees have completed the course:

	Amount
Fiscal year 1999 Courses:	
Leadership for a Democratic Society	$44,500
Aspen Institute	8,700
Management Development Seminar	9,150
Executive Development Seminar	6,100
Presidential Management Intern Seminar	5,325
Executive Potential Seminar	14,700
Women's Executive Leadership Program	7,300

	Amount
Leadership Potential Seminar	15,250
Seminar for New Managers	6,100
Strategic Planning Through The Power of Vision	4,000
Advanced Leadership Program	9,750
Supervisory Development Program	2,250
Career Strategies Seminar For Prospective Managers	14,400
Basic Supervisory Skills	4,100
New Leaders Program	7,980
Aspiring Leaders Program	1,995
Negotiation Skills	1,920
Managing Up	1,125
General Employee Training	154,355
Total	319,000

Fiscal year 2000 Courses Completed to date:

Amount Leadership for a Democratic Society	27,450
Developing Customer-Focused Organizations	3,050
Leadership Potential Seminar	18,300
Management Development Seminar	9,150
Federal Budgetary Policies and Processes	6,100
Supervisory Leadership Seminar	9,150
Environmental Policy Issues	6,100
Capitol Hill Workshop	3,580
White House Workshop	1,790
Executive Potential Program	9,800
Congressional Operations Seminar	6,650
New Leaders Program	5,985
Advanced Leadership Program	1,500
Motivating Others: Bringing Out the Best in People	7,375
Effective Writing	1,725
Grammar Review	1,800
Effective Briefing Techniques	3,300
General Employee Training	58,004
Total	180,809

Fiscal year 2001 planned additional Learning and Development activities to be funded from the administrative expenses account:

Course:	Amount
Transit Academy	$4,200
Leadership for a Democratic Society	28,150
Aspen Institute Executive Seminar	6,525
Developing Customer-Focused Organizations	4,000
Leadership Potential Seminar	21,350
Management Development Seminar	9,150
Federal Budgetary Policies and Processes	6,100
Supervisory Leadership Seminar	12,200
Environmental Policy Issues	6,100
Capitol Hill Workshop	5,570
White House Workshop	2,685
Women's Executive Leadership Program	3,650
Executive Potential Program	14,700
Congressional Operations Seminar	8,550
New Leaders Program	5,990
Advanced Leadership Program	2,780
Motivating Others: Bringing Out the Best in People	7,575
Presidential Management Intern Leadership Seminar	5,700
Effective Writing	9,600
Effective Briefing Techniques	9,600
Coaching Skills for Managers and Supervisors	30,000
Interpersonal Communication Skills	20,000
Conflict Intervention, etc.	14,000
Team Decision Making	18,000
Communicating With Style	37,800

	Amount
Managing Multiple Priorities	26,000
Total	319,975

The $319,975 does not include the $27,000 budgeted to support TASC training. FTA has $575,000 included in the fiscal year 2000 base for this activity.

STAFFING

Question. How much of the proposed salaries and benefits increase (+$2,828,000) is associated with the pending reprogramming which includes an FTE increase from 485 to 495? (Please be sure to include any within-grade and step increase funding that is assumed to be associated with these positions.) Over how many months in fiscal year 2000 does this portion of the increase cover?

Answer. Of the $2,828,000, $835,000 is associated with the pending reprogramming. In fiscal year 2000, the FTA planned to hire 20 new positions throughout the fiscal year thus increasing FTE from 485 to 495. In fiscal year 2001, these positions will be fully annualized, therefore, increasing the FTE from 495 to 505. This portion of the increase covers 12 months of the fiscal year.

Question. The FTA has proposed increasing the FTE level from 495 to 505 in fiscal year 2001. Please break out these staffing increases by title, grade, and projected starting dates, including where each position will be located.

Answer. The following chart provides a break out of the proposed FTE funding increase:

FISCAL YEAR 2001 HIRING PLAN

Office	Positions (title/grade)	EOD
Office of Planning	Community Planner, GS–9/11/12	9/10/00
Region 1	General Engineer, GS–11/12/13	9/24/00
Region 3	Community Planner, GS–9/11/12	10/8/00
Region 4	General Engineer, GS–11/12/13	10/22/00
Region 5	Community Planner, GS–11/12	11/05/00
Region 6	Community Planner, GS–11/12	11/19/00
Region 9	General Engineer, GS–11/12/13	9/10/00
Office of Program Management	General Engineer, GS–11/12/13	9/24/00
	General Engineer, GS–11/12/13	10/8/00
Office of Research Demo. & Innovation	Transportation Program Specialist, GS–12/13	11/05/00
Total—10 New Positions		10 FTE

Question. Please provide a table similar to the one found on page 478–479 of Senate hearing 106–221, detailing FTA's FTEs for fiscal years 1999, fiscal year 2000 on-board, estimated end-of-year (assuming the approval of the pending reprogramming), and 2001 proposal.

Answer. The following table provides detail of FTA's FTE through fiscal year 2001:

FEDERAL TRANSIT ADMINISTRATION FULL-TIME EQUIVALENT (FTE)

Organization	Fiscal year				
	1998 actual FTE	1999 actual FTE	2000 on-board FTE	2000 estimated FTE	2001 requested FTE
Headquarters Offices:					
Administrator	6	5	4	4	5
Public Affairs	11	12	12	12	12
Chief Counsel	32	29	31	31	33
Budget and Policy	46	49	50	52	53
Civil Rights	25	26	26	26	26
Administration	74	74	70	72	65
Res. Demonstration and Innovation	41	41	45	44	46

FEDERAL TRANSIT ADMINISTRATION FULL-TIME EQUIVALENT (FTE)—Continued

Organization	Fiscal year				
	1998 actual FTE	1999 actual FTE	2000 on-board FTE	2000 estimated FTE	2001 requested FTE
Program Management	57	55	58	59	60
Planning	25	29	32	31	33
Subtotal Headquarters	317	320	328	331	333
Regional Offices:					
Region 1, Cambridge, MA	13	13	14	14	14
Region 2, New York, NY	17	18	19	19	20
Region 3, Philadelphia, PA	20	20	21	20	21
Region 4, Atlanta GA	21	21	20	21	22
Region 5, Chicago, IL	22	23	24	24	24
Region 6, Fort Worth, TX	16	17	16	16	17
Region 7, Kansas City, MO	9	11	12	12	12
Region 8, Denver, CO	7	8	8	8	9
Region 9, San Francisco, CA	20	21	22	22	23
Region 10, Seattle, WA	9	9	9	8	10
Subtotal Regions	154	161	165	164	172
Total FTA	471	481	493	495	505

INFORMATION TECHNOLOGY

Question. Please lay out a schedule, by fiscal year and associated cost, of information technology improvements from fiscal year 1999 through the anticipated completion of the current upgrade. Break out each activity to major sub-activity levels.

Answer. The following table provides information technology improvements at the major sub-activity level:

INFORMATION TECHNOLOGY IMPROVEMENTS

[In thousands of dollars]

Major sub-activity	Fiscal year		
	1999	2000	2001
Year 2000: Conversion & Remediation	1,350	.....	.....
Accounting Systems: DELPHI Conversion	.....	200	100
Financial Systems: DAFIS Operations	.....	200	.....
TEAM System: Application Enhancements	.....	750	250
Contractor Support (Help desk, etc.)	.....	700	.....
PDD63: Awareness/Renovation & Testing	.....	300	250
Electronic Commerce:			
Equipment & Software	100	300	.....
Operations & Expansion	.....	.....	150
Data Warehousing	.....	.....	150
DOT Bandwidth	.....	.....	15
Standardize and Secure e-mail	.....	.....	26
Telecommunications: Infrastructure Upgrades	200	300	.....
IT Equipment and Software: Software Licensing & Workstation Upgrades	150	.....	.....
IT Improvement Total	1,800	2,750	941

Note: Does not include increases for inflation adjustments.

Question. On pages 33–35 of the budget justification, you describe the components of the requested $941,000 increase for information technology. (This increase is predicated on the assumption that the pending reprogramming increase for IT in fiscal year 2000 will be approved.) Please present this list of activities in priority order, and justify why each project is necessary in fiscal year 2001.

Answer. The increase in information technology activities cuts across major governmental and departmental initiatives. All initiatives have a high importance to proceed with activity in fiscal year 2001 due either to Executive, Federal and/or Departmental mandates or flagship initiatives. In priority order they are as follows:

—*Presidential Decision Directive 63 ($250,000).*—Federal mandate requires FTA to protect the infrastructure of Federally operated systems, and also to allow FTA to continue its partnership with departmental initiatives involving electronic commerce through mission critical systems accreditation. $300,000 is planned for fiscal year 2000.

—*Transportation Electronic Award and Management (TEAM) ($250,000).*—Funds will provide software, hardware and communications necessary to implement the web-enabled TEAM application. Transitioning to the internet will streamline FTA's business process by making it easier to access the federal financial assistance application process.

—*Electronic Commerce in Procurement ($150,000).*—To provide annual lifecycle maintenance, licenses and core operations of FTA's electronic commerce program. We are planning $400,000 in fiscal year 2000.

—*Data Warehousing ($150,000).*—To continue the standardization of "pockets of information" so that information is accessible and sharable from a single source, eliminating redundancy of systems and information flow, and providing a more effective and efficient information sharing environment. This is a new activity in fiscal year 2001.

—*DELPHI—Accounting System Conversion ($100,000).*—To convert and migrate the Agency's information in DAFIS to a new automated accounting system. We are planning $200,000 in fiscal year 2000.

—*Strategic Communications—Institution of a Standard and Secure Departmental E-mail System in support of all Departmental Goals ($26,000).*—This builds on securing information and systems and fosters a "OneDOT" approach to sharing information over a secured infrastructure, demonstrating that DOT is serious about protecting its information and maintaining the public confidence in the Department. Intermodal meetings were held, however funding is requested in fiscal year 2001.

—*Strategic Communications—Increase Bandwidth for Targeted Segments of Departmental Networks ($15,000).*—Under the "OneDOT" approach, this funding would provide required infrastructure improvements for FTA to communicate efficiently and effectively with selected Departmental systems.

PROGRAM MANAGEMENT OVERSIGHT

Question. Please detail the authorized takedown levels (percentage and dollar amounts) for both formula and capital investment grants for fiscal years 1999, 2000, and 2001, and the amounts requested and enacted for PMO each of those fiscal years.

Answer. The following table provides a detail of FTA's Oversight takedown levels:

FEDERAL TRANSIT ADMINISTRATION FISCAL YEAR 1999–2001 OVERSIGHT BUDGET

[Dollars in thousands]

Section/Program	Fiscal year 1999 oversight take-down	Percent of app.	Fiscal year 2000 oversight take-down	Percent of app.	Fiscal year 2001 oversight take-down	Percent of app.
Formula Programs:						
Alaska Railroad (Sec. 5307)	$24,250	50	$24,250	50	$24,250	50
Urbanized Area Formula (Sec. 5307)	12,736,954	50	13,864,451	50	14,986,580	50
Nonurbanized Area Formula (Sec. 5311)	889,618	50	968,065	50	1,046,416	50
Capital Investment Grants:						
Bus and Bus Facilities (Sec. 5309)	3,760,500	75	4,096,500	75	3,594,000	75
Fixed Guideway Modernization (Sec. 5309)	6,771,000	75	7,353,000	75	7,938,000	75

FEDERAL TRANSIT ADMINISTRATION FISCAL YEAR 1999–2001 OVERSIGHT BUDGET—Continued

[Dollars in thousands]

Section/Program	Fiscal year 1999 oversight take-down	Percent of app.	Fiscal year 2000 oversight take-down	Percent of app.	Fiscal year 2001 oversight take-down	Percent of app.
New Starts (Sec. 5309)	6,771,000	75	7,353,000	75	7,938,000	75
Total	30,953,322	.....	33,659,266	.....	35,527,246	.....
Amount Requested For PMO	16,000,000	.....	18,067,000	.....	17,520,000	.....
Actual Obligations (includes carryover)	23,502,000	.....	21,887,000	.....	.....	.....

Question. Why doesn't the budget request assume the fully authorized takedown amounts for oversight activities in fiscal year 2001?

Answer. The budget request assumes the fully authorized take-down of $35.5 million for oversight activities in fiscal year 2001. The Oversight Program increases commensurately with the increase of the Formula and Capital Investment programs. This level of funding is necessary to meet the growing demands on the Oversight Program. These funds are used to carryout our statutory oversight functions. As the New Starts project list grows more funds are required to oversee these projects. Over 61 percent of the funds are for Project Management and Financial Oversight activities. Safety Oversight is funded with 9 percent of the funds; the remaining funds support procurement and management oversight. As the FTA program grows under the guaranteed level provided in TEA–21, so will the need for oversight. Therefore, the percentage take-down from the capital portions of the FTA program for oversight activities is an appropriate means of funding these requirements.

Question. Please provide the names of contractors, their geographic location, annual and total costs of contracts, and a short description of each contract, for each PMO contract let in fiscal year 1999 and thus far in 2000.

Answer. A total of 9 Project Management Oversight Contracts were let in Fiscal year 1999 while none were awarded in fiscal year 2000. This list does not include non-PMOC activities such as Financial Management Oversight and Procurement System Reviews. The total and annual cost of the 9 contracts is provided in the attached chart.

FEDERAL TRANSIT ADMINISTRATION—PROJECT MANAGEMENT OVERSIGHT CONTRACTORS—FISCAL YEAR 1999–FISCAL YEAR 2000

Contractor	Location	Contract amount	Fiscal year		PMO projects monitored
			1999 expenditures	2000 expenditures	
Gannett Fleming, Inc.	Camp Hill, PA	$12,183,951	$1,600,000	$1,701,763	Region IX Seattle.
Fluor Daniel, Inc.	Irvine, CA	10,391,273	2,000,000	1,300,000	LIRR, NYCDOT, NCTA.
Hill International, Inc.	Newport Beach, CA	11,533,331	3,012,183	2,337,617	Los Angeles Metro Rail Salt Lake City.
Day & Zimmerman	Philadelphia, PA	10,810,846	1,934,484	1,665,692	WMATA, MBTA, and Region IV.
Sverdrup Civil, Inc.	Maryland Heights, MO	11,576,298	1,000,000	525,000	Chicago Miami-Dade.
Delon Hampton and Associates, Chtd	Washington, D.C.	12,507,225	1,351,582	1,600,000	New Jersey Transit, Metro North RR, CONNDOT.
STV, Inc.	Philadelphia, PA	13,850,585	3,728,466	1,902,469	RTD Denver MUNI & BART.
Daniel, Mann, Johnson & Mendenhall	Baltimore, MD	9,474,885	1,480,000	590,357	Dallas & Railtran, Cleveland, and Phoenix.
Parsons Brinckerhoff Construction Services	Herndon, VA	13,065,484	.....	260,000	Little Rock Junction Bridge/ River Rail.
Totals		105,393,878	16,106,715	11,882,989	

Question. Please provide a table similar to that found on page 484 of Senate hearing record 106–221, indicating oversight obligations by activity broken out for fiscal years 1997, 1998, 1999, 2000 estimate, and 2001 planned.

Answer. The following table provides actual Oversight obligations for fiscal year 1997 through fiscal year 1998 and estimated for fiscal year 2000 through fiscal year 2001:

OVERSIGHT OBLIGATIONS BY ACTIVITY

[In thousands of dollars]

	Fiscal year				
	1997 actual	1998 actual	1999 actual	2000 estimate	2001 planned
Project Management Oversight	3,984	10,198	23,502	21,887	17,520
Financial Management Oversight	2,060	3,533	3,530	4,500	4,500
Safety Oversight	2,825	3,000	2,827	4,010	3,100
Drug & Alcohol Compliance	1,150	1,525	1,410	2,200	1,500
SAMIS	75	(1)	(1)	(1)	(1)
DAMIS	600	(1)	(1)	(1)	(1)
State Rail Safety Oversight	200	650	693	900	800
Security Audits	550	825	724	910	800
Alternative Fuels	250	(1)	(1)	(1)	(1)
Procurement Oversight	1,130	1,588	1,320	1,784	1,500
Management Oversight	13,418	6,216	5,576	10,456	8,907
Civil Rights Reviews, DBE, EEO	586	477	709	934	800
ADA Civil Rights Reviews	.....	485	951	963	850
National Transit Database (NTD)	4,308	(1)	(1)	(1)	(1)
NTD Phase 3 Redesign	.....	.....	.....	.....	1,515
Triennial and State Management Reviews	4,010	3,959	3,726	3,490	3,500
Electronic Grant Making	2,000	.....	.....	.....	.....
Planning Compliance	467	995	190	2,203	1,110
Rail Control Technology	.....	.....	.....	577	402
Bus Technology	500	300	.....	642	230
Turnkey Oversight	1,546	(2)	(2)	(2)	(2)
ITS National Architecture	.....	.....	.....	1,647	500
Total Oversight	23,417	24,535	36,755	42,637	35,527

[1] Funded under National Research and Technology.
[2] Turnkey Oversight is funded under other oversight acitivites.

FINANCIAL MANAGEMENT OVERSIGHT ACTIVITIES

Question. What financial management oversight (FMO) reviews were conducted in fiscal year 1999? What FMO reviews are underway or planned for fiscal year 2000? What FMO reviews are planned for fiscal year 2001?

Answer. The following FMO reviews were completed in fiscal year 1999:

Financial Capacity Assessments

Massachusetts Bay Transportation Authority
Maryland Mass Transit Administration
Dallas Area Rapid Transit
Utah Transit Authority
Santa Clara Valley Transportation Authority
Sacramento Regional Transit District

Additional Financial Assessments (New Starts Evaluations)

Austin, Texas/Northwest/North Central Corridor
Chicago, Illinois/Central Kane Corridor
Chicago,Illinois/North Central Corridor
Chicago, Illinois/Southwest Corridor
Cincinnati, Ohio/Interstate 71 Corridor
Cleveland, Ohio/Euclid Corridor Improvement Project

Denver, Colorado/Denver Southeast Corridor
Fort Lauderdale, Florida/Tri-County Commuter Rail
Fort Worth, Texas/RAILTRAN Phase II
Kansas City, Missouri/Southtown Corridor
Las Vegas, Nevada/Las Vegas Resort Corridor Fixed Guideway
Little Rock, Arkansas/Little Rock River Rail Project
Memphis, Tennessee/Medical Center Rail Extension
Miami, Florida/Miami East-West Corridor
Miami, Florida/Miami North 27th Avenue
Minneapolis, Minnesota/Hiawatha Avenue Corridor
New Orleans, Louisiana/Canal Streetcar Spine
New York, New York/Long Island Rail Road Access toManhattan's East Side (East Side Access)
Norfolk, Virginia/Norfolk-Virginia Beach Corridor
Northern New Jersey/Hudson-Bergen Waterfront Light Rail Transit
Northern New Jersey/Newark-Elizabeth Rail Link SystemMinimum Operable Segment-2 (MOS–2)
Orange County, California/Orange County Transitway Project
Orlando, Florida/Central Florida Light Rail System
Phoenix, Artizona/Central Phoenix/East Valley Corridor
Pittsburgh, Pennsylvania/Martin Luther King, Jr. East Busway Extension—Phase I
Pittsburgh, Pennsylvania/Pittsburgh Stage II Light Rail Transit
Portland, Oregon/South-North Corridor
Raleigh, North Carolina/Regional Transit Plan Phase I Regional Rail—Durham to North Raleigh
San Diego County, California/LOSSAN Rail Corridor
San Diego County, California/Mid Coast Corridor
San Diego County, California/Mission Valley East
San Diego County, California/Oceanside-Escondido Passenger Rail Project
San Francisco, California/Third Street Light Rail Project Phase 1
San Juan, Puerto Rico/Minillas Extension
Seattle, Washington/Seattle Link Light Rail
Seattle, Washington/Seattle-Tacoma Sounder Commuter Rail
Tampa, Florida/Tampa Bay Regional Rail System
Washington, D.C. Metropolitan Area/Largo Metrorail Extension

Financial Management Systems Full Scope Reviews

Vermont Agency of Transportation
Port Authority of Allegheny County (PA)
City of Washington (PA)
Lehigh & Northhampton Transportation Authority
VA Department of Rail & Public Transportation
Borough of Pottstown (PA)
Triangle Transit Authority
Georgia Department of Transportation
Greater Cleveland Regional Transit Authority
Minnesota Department of Transportation
Metropolitan Council (Met Council)
Ohio-Kentucky-Indiana Regional Council
Metro Transit
Galveston-Island Transit
Brazos Valley Community Action Agency
Shreveport Transit Management, Inc.
Lincoln Transportation System
City & County of Honolulu
Regional Transportation Commission of Washoe County (Reno)
Metro (Seattle)

The FMO reviews that are planned, in process or completed in fiscal year 2000 are:

	Status
Financial Capacity Assessments:	
New York Metropolitan Transportation Authority	Planned.
Port Authority of Allegheny County (Pittsburgh)	Planned.
Miami-Dade Transit Agency	Planned.
MARTA (Atlanta)	In Process.
Chicago Transit Authority	Planned.
Metra (Commuter Rail Division of the Chicago RTA)	Planned.

	Status
Metropolitan Council/Metro Transit (Minneapolis)	Planned.
Houston Metro	In Process.
Colorado DOT	Planned.
Regional Public Transportation Authority (Phoenix)	Planned.
Tri-County Metropolitan Transportation District of Oregon	In Process.
Central Puget Sound Regional Transit Authority	Planned.
Washington Metropolitan Area Transit Authority	In Process.
Memphis Area Transit Authority	In Process.
New Jersey Transit Corporation	Completed.
Tri-County Commuter Rail Authority	Completed.
Puerto Rico—Tren Urbano/Minellas Extension	Completed.
San Diego Metropolitan Transit Development Board	Completed.
Denver Regional Transportation District	Completed.
Bi-State Development Agency (St. Louis)	Completed.
Additional Financial Assessments (New Starts Evaluations):	
Austin, Texas/Light Rail Corridors	Completed.
Baltimore, Maryland/Baltimore Central Light Rail Double Tracking	Completed.
Boston, Massachusetts/South Boston Piers Transitway—Phase II	Completed.
Chicago, Illinois/Douglas Branch Reconstruction Project	Completed.
Chicago, Illinois/Ravenswood Line Expansion Project	Completed.
Chicago, Illinois/Central Kane Corridor Commuter Rail	Completed.
Chicago, Illinois/North Central Corridor Commuter Rail	Completed.
Chicago, Illinois/Southwest Corridor Commuter Rail	Completed.
Cincinnati, Ohio/Interstate 71 Corridor	Completed.
Cleveland, Ohio/Euclid Corridor Improvement Project	Completed.
Fort Worth, Texas/Trinity Railway Express Phase II	Completed.
Hartford, Connecticut/New Britain—Hartford Busway	Completed.
Johnson County, Kansas—Kansas City, Missouri/I–35 Commuter Rail	Completed.
Las Vegas, Nevada/Las Vegas Resort Corridor Fixed Guideway MOS	Completed.
Little Rock, Arkansas/River Rail Project	Completed.
Los Angeles—San Diego County, California/LOSSAN Rail Corridor Improvements	Completed.
Maryland/MARC Commuter Rail Improvement Projects	Completed.
Miami, Florida/East-West Corridor	Completed.
Miami, Florida/North 27th Avenue	Completed.
Miami, Florida/South Miami-Dade Busway Extension	Completed.
Minneapolis, Minnesota/Hiawatha Avenue LRT	Completed.
Nashville, Tennessee/East Corridor Commuter Rail	Completed.
New Orleans, Louisiana/Canal Streetcar Spine	Completed.
New York, New York/Long Island Rail Road Access to	Completed.
Manhattan's East Side (East Side Access)	Completed.
Norfolk, Virginia/Norfolk-Virginia Beach Corridor	Completed.
Orange County, California/Centerline Rail Corridor	Completed.
Phoenix, Arizona/Central Phoenix/East Valley Corridor	Completed.
Pittsburgh, Pennsylvania/Stage II LRT Reconstruction	Completed.
Raleigh, North Carolina/Regional Transit Plan Phase I Regional Rail	Completed.
Salt Lake City, Utah/CBD to University LRT	Completed.
San Diego County, California/Oceanside—Escondido Rail Project	Completed.
San Francisco, California/Third Street Light Rail Project Phase 1	Completed.
Seattle, Washington/Central Link LRT (MOS)	Completed.
Seattle, Washington/Everett-to-Seattle Commuter Rail	Completed.
Tacoma, Washington/Lakewood-to-Tacoma Commuter Rail	Completed.
Tampa, Florida/Tampa Bay Regional Rail System	Completed.
Washington, D.C. Metropolitan Area/Dulles Corridor Rapid Transit	Completed.
Washington, D.C. Metropolitan Area/Largo Metrorail Extension	Completed.
Aspen—Glenwood Springs, CO Corridor	Planned.
Boston—Providence Commuter Rail	Planned.
Bridgeport, CT Intermodal Transportation Center	Planned.

	Status
Charlotte North-South Corridor Transitway	Planned.
Cleveland Berea Extension	Planned.
Cleveland Waterfront Line Extension	Planned.
Dallas Northwest Corridor	Planned.
Dallas Southeast Corridor	Planned.
Louisville South Central Corridor	Planned.
Minneapolis—St. Cloud Northstar Corridor	Planned.
Minneapolis—St. Paul Riverview Corridor	Planned.
Nashua—Lowell Commuter Rail Extension	Planned.
New York City Manhattan East Side Alternatives	Planned.
Northern Indiana West Lake Corridor	Planned.
Spokane South Valley Corridor	Planned.
Washington County, OR Wilsonville-Beaverton Corridor	Planned.
Wilmington Transit Connector	Planned.
Financial Management Systems Full Scope Reviews:	
Marble Valley Regional Transit District	Planned.
Delaware DOT	Planned.
Potomac and Rappahannock Transp. Commission	Planned.
Greenville Transit Authority	In Process.
METRA—Commuter Rail Division of the RTA	Planned.
Chicago Transit Authority	Planned.
Southwest Ohio Regional Transit Authority	Planned.
Transit Authority of Northern Kentucky	Planned.
Metropolitan Tulsa Transit Authority	Planned.
Central Oklahoma Transportation and Parking Authority	Planned.
Kansas DOT	Planned.
City of Pueblo	Planned.
Easter Seals—Project Action	Planned.

In addition, FTA continues to monitor grantees that underwent financial capacity assessments in fiscal year 1999 and prior.

FTA will determine the Financial Management Oversight program reviews to be conducted in fiscal year 2001, by August 31, 2000. Each summer, FTA goes through a Risk Assessment process that includes recommendations from regional offices. The regional offices determine the grantees' risk level and recommend the type of financial management oversight review to be conducted. Among the areas under consideration for Financial Capacity Assessments in fiscal year 2001 are: New Orleans, Oceanside, CA, Cleveland, Little Rock, Nashville, and Clark County, Nevada.

Among the potential new projects for which Financial Assessments for New Starts Evaluations would be conducted in fiscal year 2001 are: Boston North-South Rail Link, Canton-Akron-Cleveland Corridor, Denver East Corridor, Eugene-Springfield BRT, Harrisburg Corridor One, Indianapolis Northeast Corridor, Milwaukee Downtown System, New York/New Jersey Trans-Hudson Midtown, Brooklyn-Manhattan Access, Omaha Downtown Trolley System, Orlando Airport Connector, Philadelphia Cross County Metro, Philadelphia Schuylkill Valley Metro, Ogden-Provo-Orem Commuter Rail, Seattle SeaTac Airport PRT, and Tampa-St. Petersburg. FTA undertakes, minimally, an annual Financial Assessment for each New Starts project that is in either preliminary engineering or final design.

Question. You have requested a $1,000,000 reimbursement to the DOT Inspector General for costs associated with audits and review of new fixed guideway systems. Will this reimbursement funding be provided from PMO, or from administrative funds? Why do you feel justified in requesting a lesser reimbursement level in fiscal year 2001, with an increased number of pending full funding grant agreements which may require baseline assessments or other Inspector General audits and reviews?

Answer. The $1,000,000 reimbursement funding for the Office of Inspector General will come from the Administrative Expenses account. OIG activities were funded under Administrative Expenses in fiscal year 2000 and under the Oversight Program in fiscal year 1999. The reduction in funding for the Office of Inspector General in fiscal year 2001, is based on the expectation that there are no urgent emerging transit issues expected to be investigated. FTA has been praised by the OIG for appropriate management of projects. The $1,000,000 a year should be sufficient to meet the audit and investigative needs of the New Starts pipeline.

Question. What are the trigger factors in determining that the Inspector General should perform a baseline audit of a full funding grant agreement project?

Answer. The OIG has indicated to FTA that there are no specific factors that trigger an audit. Departmental and Congressional inquiries are given priority. The OIG

attempts to survey projects on a continuing basis to see if any emerging issues such as large cost increases or lengthy schedule delays may indicate vulnerabilities.

JOB ACCESS AND REVERSE CONNUTE GRANTS

Question. Please provide a funding history table for the Job Access and Reverse Commute grant program, showing the guaranteed firewall TEA–21 funding level for each fiscal year in the authorization, the administration's funding request (and source of additional funds), and the enacted funding level for the program.

Answer. The following table provides a funding history table for the Job Access and Reverse Commute grant program:

JOB ACCESS AND REVERSE COMMUTE GRANTS FUNDING HISTORY

[In thousands of dollars]

Fiscal year	Guaranteed funding	Budget request	Enacted level
1999	$50,000	[1] $100,000	[1] $75,000
2000	75,000	[2] 150,000	75,000
2001	100,000	[2] 150,000	([3])

[1] Prior to TEA–21 Reauthorization.
[2] RABA funds requested as source of additional funds.
[3] Pending.

Question. What is the length of availability of federal funds made available as grant awards under the Job Access and Reverse Commute program?

Answer. As authorized in TEA–21, Job Access and Reverse Commute funds are available until expended. However, FTA has urged that projects be submitted that can be quickly implemented. The fiscal year 2000 notice states that project readiness is a factor to be considered in awarding grants and that applicants must be able to implement a project preferably within six months of award, but no longer than one year after selection.

Question. Have all the fiscal year 1999 Access to Jobs funds been obligated? If not, why not?

Answer. As of March 31, 2000, FTA had obligated $46.5 million of the $70.8 million designated for selected projects in fiscal year 1999. This represents 125 out of 191 selected projects. Causes of delays in finalizing applications included meeting FTA standard grant requirements, final securing of matching funds, and project scope adjustments. These have all slowed applicants' progress in finalizing grant applications. It must also be recognized that approximately half of the projects involve non-traditional applicants who are dealing with the FTA grant process and requirements for the first time.

Question. To what extent will DOT obligate all fiscal year 2000 Access to Jobs funds by the end of the fiscal year? What is the timetable for selecting grantees for the discretionary program funding (roughly $25,000,000) in fiscal year 2000? When will the FTA publish in the Federal Register its selection of Job Access and Reverse Commute awards for fiscal year 2000?

Answer. It is highly unlikely that FTA will have obligated all of the fiscal year 2000 Job Access and Reverse Commute funds by the end of the fiscal year. The national solicitation was issued on March 10, 2000 with proposals and applications due on May 9. The competitive projects are expected to be selected and announced in the Federal Register in early September. In cases where applicants submitted only proposals, such applicants will then proceed to submit final applications addressing FTA standard grant requirements. The two-step application process is designed for new proposers. Applicants receiving congressional earmarks or applicants seeking continued funding for projects awarded in fiscal year 1999 will more likely submit a full one-step application, and may be processed sooner.

Question. For the funds that it will receive in fiscal year 2001, what are the Department's time frames for evaluating and awarding additional grants?

Answer. FTA expects to solicit competitive projects within 30 days of the enactment of the fiscal year 2001 transportation appropriation for the Job Access and Reverse Commute program. Applicants will be given 120 days to submit proposals and selections will be made within 120 days thereafter.

Question. How many applications did DOT receive in the fiscal year 1999 grant cycle? How much in requested funds is represented by these applications? How

many applications did DOT receive in the fiscal year 2000 grant cycle? How much in requested funds is represented by these applications?

Answer. DOT received proposals for 266 projects in fiscal year 1999. These proposals requested a total of $108 million. Since fiscal year 2000 proposals are due by May 9, 2000, DOT does not yet know the number of proposals that will be received.

Question. Please clarify the response on page 489 of Senate hearing 106–221 regarding the use of Job Access and Reverse Commute program funds to help individuals purchase cars.

Answer. Last year, we reported that FTA could not assist in the purchase of automobiles reserved for individuals' personal and private use. However, automobiles could be acquired by qualified public and non-profit organizations as long as they were used for ridesharing or other public transportation uses. The agency receiving the grant must have continuing control of the vehicle to ensure that the purposes of the grant are carried out in accordance to the provisions of the Act.

FTA recently reviewed this situation with regard to a specific congressional earmark in the Job Access and Reverse Commute program. FTA determined that funding loan programs to assist in the purchase of an automobile is eligible as long as the recipient agency enters into a contractual arrangement with the individual being assisted to ensure that the vehicle is tied to a public transportation purpose. FTA's determination is specific to this congressional earmark and is not intended to encourage the use of limited FTA funding for this purpose.

Question. Given the gap between transit services in smaller communities and the need for transportation for welfare-to-work programs, would the Federal Transit Administration support a new program to fund car-based initiatives where transit resources are scarce or non-existent?

Answer. Generally FTA believes that the limited funds for this program should be used to support mass transportation activities. FTA believes that there are other sources of federal funds that are more appropriate for funding car based initiatives such as the Temporary Assistance to Needy Families (TANF) funding. The TANF program is funded at $16.5 billion annually.

USE OF TEMPORARY ASSISTANCE TO NEEDY FAMILIES (TANF) FUNDS

Question. In the fiscal year 1999 grant cycle for Job Access and Reverse Commute grants, what percentage of local matching funds was provided by Temporary Assistance to Needy Families (TANF) program funds?

Answer. TANF funds were commonly used as matching funds. DOT is in the process of gathering this information and will make it available as soon as the information is collected.

Question. What problems have been experienced by Job Access and Reverse Commute grant recipients in securing TANF and other federal funds to be used for matching purposes? How has FTA assisted grant recipients in resolving these problems?

Answer. Job access applicants have had timing problems in securing the match. When Job Access and Reverse Commute grants were announced in May 1999, some expected TANF matching funds had been reallocated to other purposes since the end of the fiscal year was fast approaching in many states. Additionally, some state human resource departments have resisted the new flexibility to use TANF funding for new service development. DOT has worked with the Department of Health and Human Services (DHHS) and the Department of Labor (DOL) to develop guidance on the use of TANF and other Federal funds. This guidance is currently being updated and will be reissued shortly.

More efforts are needed to clarify how TANF can be used for transportation purposes. FTA is working with the American Public Transportation Association (APTA), the Community Transportation Association of America (CTAA), the American Association of State Highway and Transportation Officials (AASHTO), the Association of Metropolitan Planning Organizations (AMPO) and the Association for Commuter Transportation (ACT) in implementing an aggressive technical assistance program to help applicants and grantees. FTA is planning to hold a series of technical assistance regional conferences where the use of TANF will be addressed by the Department of Health and Human Services (DHHS). This subject will be addressed additionally at a national employment transportation conference in June 2000.

Question. What problems have been experienced at the State level in making TANF dollars available? What role has FTA played with the States in resolving these problems?

Answer. As mentioned above, some state and local agencies seeking to use TANF funding have found state budget or human service offices resistant to the use of

TANF funding to develop transportation services. These agencies believe that TANF funding must be directly tied to individuals being assisted under the TANF program and want an individual-by-individual accounting of funding expenditures. New TANF guidance does not require this when TANF funds are used to pay for the start-up and operating cost of new service. DOT and DHHS are working together to clarify further to states and local human service agencies the flexibility that they have in applying TANF funds to the development of new services. FTA is also meeting with AASHTO to work together along with DHHS staff to resolve these issues.

Question. Are there advantages to using Social Services Block Grants as matching funds for the JARC program rather than TANF dollars? How could this process be improved?

Answer. At one time, there was an advantage to transferring TANF funds to Social Service Block Grants (SSBG) because SSBG funds did not impose time limits for individuals who received these funds and did not require an individual tracking system as did TANF. New TANF funding rules have largely reduced these advantages since tracking is not associated with new service development and individuals receiving TANF funding for transportation purposes alone do not trigger time limits.

FORMULA GRANTS

Question. Please provide a table displaying the state-by-state distribution of the formula program funds within each of the program categories for fiscal year 2001 (as shown on pages 490–491 of Senate hearing 106–221). Please add a column to the far right of the table that expresses each state's share of the formula grants program as a percentage of the total program.

Answer. The following table provides a state-by-state distribution of formula program funds:

FEDERAL TRANSIT ADMINISTRATION, FISCAL YEAR 2001 GUARANTEED LEVEL APPORTIONMENT FOR FORMULA PROGRAMS

[By State]

State	Section 5307 urbanized area	Section 5311 non-urbanized area	Section 5310 elderly and persons with disabilities	Total formula programs	State percent of total
Alabama	$13,046,848	$4,974,114	$1,363,957	$19,384,919	0.59
Alaska	[1] 7,433,414	741,748	197,821	8,372,983	0.26
American Samoa	.....	105,722	52,867	158,589	.....
Arizona	33,260,503	2,177,536	1,200,201	36,638,240	1.12
Arkansas	5,119,390	3,976,597	946,967	10,042,954	0.31
California	482,887,208	9,705,577	7,477,863	500,070,648	15.27
Colorado	37,142,854	2,071,753	926,429	40,141,036	1.23
Connecticut	52,359,019	1,879,275	1,064,511	55,302,805	1.69
Delaware	6,122,420	468,834	308,825	6,900,079	0.21
District of Columbia	27,169,899	.....	306,385	27,476,284	0.84
Florida	146,712,613	6,239,173	5,039,527	157,991,313	4.83
Georgia	51,231,289	7,272,683	1,774,590	60,278,562	1.84
Guam	.....	300,966	134,536	435,502	0.01
Hawaii	25,780,183	816,248	398,306	26,994,737	0.82
Idaho	3,072,028	1,646,756	408,081	5,126,865	0.16
Illinois	206,007,568	6,672,281	3,250,600	215,930,449	6.59
Indiana	32,873,659	6,445,272	1,695,963	41,014,894	1.25
Iowa	9,360,438	4,145,662	1,019,530	14,525,630	0.44
Kansas	7,996,681	3,297,743	851,478	12,145,902	0.37
Kentucky	17,131,642	5,443,854	1,306,330	23,881,826	0.73
Louisiana	27,667,179	4,502,461	1,310,621	33,480,261	1.02
Maine	2,203,751	2,172,613	515,251	4,891,615	0.15
Maryland	75,972,090	2,712,403	1,316,914	80,001,407	2.44
Massachusetts	115,219,238	2,906,872	1,905,644	120,031,754	3.67
Michigan	62,637,557	7,872,306	2,778,229	73,288,092	2.24
Minnesota	29,392,604	4,530,057	1,335,764	35,258,425	1.08
Mississippi	4,618,496	4,420,748	919,424	9,958,668	0.30

FEDERAL TRANSIT ADMINISTRATION, FISCAL YEAR 2001 GUARANTEED LEVEL APPORTIONMENT FOR FORMULA PROGRAMS—Continued

[By State]

State	Section 5307 urbanized area	Section 5311 non-urbanized area	Section 5310 elderly and persons with disabilities	Total formula programs	State percent of total
Missouri	33,532,798	5,276,351	1,720,175	40,529,324	1.24
Montana	2,324,606	1,334,002	372,751	4,031,359	0.12
Nebraska	8,078,023	2,012,840	594,428	10,685,291	0.33
Nevada	18,703,029	657,162	437,100	19,797,291	0.60
New Hampshire	3,256,965	1,739,992	411,825	5,408,782	0.17
New Jersey	178,188,359	2,487,820	2,291,863	182,968,042	5.59
New Mexico	6,743,181	1,955,803	520,371	9,219,355	0.28
New York	511,629,104	8,757,424	5,337,074	525,723,602	16.06
North Carolina	26,423,807	9,302,971	2,020,953	37,747,731	1.15
North Dakota	2,266,047	986,554	314,324	3,566,925	0.11
Northern Marianas		97,974	52,619	150,593	
Ohio	86,171,474	9,471,071	3,393,254	99,035,799	3.02
Oklahoma	10,888,938	4,048,785	1,124,568	16,062,291	0.49
Oregon	26,177,070	3,214,771	1,044,095	30,435,936	0.93
Pennsylvania	140,326,812	10,565,079	4,072,337	154,964,228	4.73
Puerto Rico	42,415,576	3,157,178	989,437	46,562,191	1.42
Rhode Island	10,057,038	404,440	456,412	10,917,890	0.33
South Carolina	10,959,566	4,656,183	1,086,351	16,702,100	0.51
South Dakota	1,634,658	1,202,532	341,032	3,178,222	0.10
Tennessee	21,984,782	6,010,601	1,614,124	29,609,507	0.90
Texas	158,452,230	12,690,049	4,206,514	175,348,793	5.36
Utah	19,572,743	911,586	483,564	20,967,893	0.64
Vermont	821,531	1,075,168	278,448	2,175,147	0.07
Virgin Islands		230,121	137,109	367,230	0.01
Virginia	60,835,448	5,328,980	1,679,979	67,844,407	2.07
Washington	82,706,220	3,733,949	1,504,629	87,944,798	2.69
West Virginia	3,960,684	3,174,933	788,425	7,924,042	0.24
Wisconsin	35,490,834	5,485,912	1,536,567	42,513,313	1.30
Wyoming	1,135,107	767,267	233,859	2,136,233	0.07
Subtotal	2,987,155,201	208,236,752	78,850,801	3,274,242,754	100
Oversight	15,010,830	1,046,416		16,057,246	
Total	3,002,166,031	209,283,168	78,850,801	3,290,300,000	
Clean Fuels				50,000,000	
Over-the-Road Bus Accessibility				4,700,000	
Grand Total				3,345,000,000	

[1] Includes $4,825,700 for the Alaska Railroad improvements to passenger operations.

USE OF FUNDING FOR DUES AND TRAVEL

Question. Can Section 5307 or Section 5309 funds be used by grantees to:
—pay dues to the American Public Transportation Association,
—pay for transit conference registration fees, or travel thereto,
—pay for consultants, lobbyists, or other representatives who attempt to affect national or state legislation?

Answer. The following gives a brief explanation of Section 5307 and 5309 eligibility requirements:

—Under Section 5309, funds may be used for capital expenses but may not be expended by grantees for association dues, conference fees or travel, nor to pay for consultants or lobbyist activities.
—Section 5307 funds to urbanized areas over 200,000 may not be used for association fees, conference fees or travel, nor may it be used to pay for consultants or lobbyist activities.
—Section 5307 funds to urbanized areas under 200,000 in population and may be used for operating expenses. Thus:
(1) grantees can use Section 5307 funds to pay dues to the American Public Transportation Association. In accordance with OMB Circular A–87, APTA dues are an eligible expense.
—FTA allows payment of 85 percent of such dues from Section 5307 funds.
—The other 15 percent of such dues were determined by an audit to be an ineligible expense because they were used exclusively for lobbying; and
(2) Grantees may use Section 5307 funds to pay for transit conference registration fees or travel thereto.
—Neither Section 5307 nor Section 5309 funds may be used to pay for consultants, lobbyists or other representatives who attempt to affect national or state legislation.

CLEAN FUELS FORMULA PROGRAM

Question. Of the bus and bus related projects identified in the fiscal year 2000 appropriations act, which specific projects would have been eligible for funding under the clean fuels formula program? (Please arrange this list by state, and note the amount provided for each project in the appropriations bill.)

Answer. We cannot identify the specific projects in fiscal year 2000 that would have been eligible for the Clean Fuels Formula program. Based on fiscal year 1999 data, where Clean Fuel Formula program funds were earmarked under the Capital Investment bus category. The following bus purchases (40′, 35′, 30′, and less than 30′ bus) were purchased under the Section 5309 Bus program. The following chart shows the majority were clean fueled:

Bus propulsion	Buses purchased	Percentage
Diesel	851	78.1
Gasoline	73	6.7
CNG/LNG/LPG	147	13.5
Methanol/Ethanol		
Electric	11	1.0
Other	7	0.6
Total	1,089	100.0

Since clean diesel fuel buses are eligible under the clean fuels formula program, conceivably any projects for the purchase of clean diesel buses could also qualify. However, under the clean fuels formula program formula, only 35 percent of the clean fuel formula funds may be used for clean diesel buses. Therefore, under the clean fuels formula program, each clean diesel project may have received a lower funding level than through earmarking of bus capital funds.

OVER-THE-ROAD BUS ACCESSIBILITY PROGRAM

Question. The transit cooperative research program (TCRP) has performed an analysis of the over-the-road bus accessibility program, which includes data on the total capital needs of operators, compliance deadlines, and the current matching fund requirements. A report on this analysis was due to the House and Senate Appropriations Committees by March 1, 2000. Has the report been completed? If so, please provide a copy of the executive summary of the report for the record. If not, please summarize the findings of this analysis.

Answer. Neither the report nor the findings of the analysis have been completed. Data that will form the basis of the analysis is being collected and it is expected that the report will be submitted to the House and Senate Appropriations Committees by May 31, 2000.

Question. Beginning in October 2000, Class I over-the-road bus companies are required by the Americans with Disabilities Act (ADA) to purchase lift-equipped

buses, or to install a wheelchair lift in any new buses which they purchase. The entire fleet of buses owned by these companies must be accessible by 2012. What is the TEA–21 guaranteed funding level for the over-the-road bus accessibility program for each year of the authorization? Are there any other federal funding programs under which these privately-owned companies could apply for assistance in meeting this mandate?

Answer. The Over-The-Road Bus Accessibility Program is the only federal funding program under which the privately owned companies can apply for assistance in meeting the mandate. The guaranteed funding levels (in millions) for the over-the-road bus accessibility program for each year of the authorization are:

OVER-THE-ROAD BUS ACCESSIBILITY PROGRAM GUARANTEED FUNDING LEVELS

[In millions of dollars]

Fiscal year	Intercity fixed-route	All others (e.g. charter and tour)	Total
1999	$2.00	.....	$2.00
2000	2.00	$1.70	3.70
2001	3.00	1.70	4.70
2002	5.20	1.70	6.95
2003	5.30	1.70	6.95
Total	17.50	6.80	24.30

Question. Please provide a list of each award made in fiscal year 1999, the recipient, the amount of the award and the purpose of the award. When are the fiscal year 2000 grant awards expected.

Answer. Ten projects were selected for funding in fiscal year 1999. The projects, purposes and Federal dollar amounts are listed in the table below. Grant applications were then completed and are being processed by FTA. One grant was awarded for $1.1 million in fiscal year 1999. The fiscal year 2000 project selections should be announced by FTA in July 2000.

FEDERAL TRANSIT ADMINISTRATION—OVER-THE-ROAD BUS FISCAL YEAR 1999 AWARDS

Region	Agency	No. of lifts on new vehicles	Cost of lifts on new vehicles	No. of retrofits	Cost of retrofits	Training	Total	Funds obligated in fiscal year 1999
1	Peter Pan Bus Lines, Springfield, MA	1	$17,000			$84,000	$101,000	
2	Shortline (Hudson Transit Bus), Mahwah, NJ			6	$120,000	30,000	150,000	
2	Adirondack Transit Lines, Kingston, NY			6	120,000	30,000	150,000	
3	Capitol Bus (Capitol Trailways of PA) Harrisburg, PA	6	92,293			10,000	102,293	
3	Carl R. Beiber Tourways, Kutztown, PA	4	60,000	3	60,000	10,000	130,000	
3	Frank Martz Coach, Wilkes Barre, PA	3	45,000			9,454	54,545	
5	Jefferson Lines, Minneapolis, MN	7	95,280			12,000	107,280	
5	Peoria Charter Coach, Peoria, IL			1	16,000	1,250	17,250	
6	Greyhound, Ft. Worth, TX	58	1,015,000			41,707	1,056,707	$1,056,707
7	Burlington Trailways, West Burlington, IA	6	81,000			10,000	91,000	
10	Northwest Stage, Spokane, WA	2	29,925				29,925	
Total		87	1,435,498	16	316,000	238,411	1,990,000	1,056,707

METROPOLITAN AND STATEWIDE PLANNING

Question. Please provide a table displaying the formula apportionments to States and MPOs for the fiscal year 2000 and fiscal year 2001 Metropolitan and State Planning Funds.

Answer. Funds for the MPOs, the Metropolitan Planning program, are apportioned by formula to the states for state distribution (by state formulas) to the MPOs. The table below shows the actual apportionment to the States for fiscal year 2000 for the Metropolitan and for the State Planning programs. The fiscal year 2001 apportionments are based on the guaranteed funding level for these programs for fiscal year 2001.

State	Section 5303		Section 5313(b)	
	Metropolitan planning		Statewide planning	
	Actual apportionment fiscal year 2000	Guaranteed funding fiscal year 2001	Actual apportionment fiscal year 2000	Guaranteed funding fiscal year 2001
Alabama	$434,813	$456,460	$113,592	$119,192
Alaska	198,569	208,454	51,875	54,432
Arizona	790,795	830,166	163,970	172,054
Arkansas	198,569	208,454	51,875	54,432
California	8,463,459	8,884,840	1,572,168	1,649,677
Colorado	645,896	678,052	146,797	154,034
Connecticut	580,320	609,211	151,605	159,078
Delaware	198,569	208,454	51,875	54,432
District/Col	267,707	281,035	51,875	54,432
Florida	2,706,938	2,841,705	628,325	659,300
Georgia	958,264	1,005,971	201,301	211,224
Hawaii	198,569	208,454	51,875	54,432
Idaho	198,569	208,454	51,875	54,432
Illinois	2,900,719	3,045,133	523,440	549,244
Indiana	704,204	739,263	166,235	174,430
Iowa	222,764	233,854	58,196	61,064
Kansas	257,521	270,342	62,884	65,984
Kentucky	308,461	323,818	78,828	82,714
Louisiana	533,037	559,575	137,549	144,329
Maine	198,569	208,454	51,875	54,432
Maryland	1,152,512	1,209,890	221,105	232,005
Massachusetts	1,405,704	1,475,688	292,035	306,431
Michigan	1,810,929	1,901,088	358,838	376,528
Minnesota	735,337	771,946	146,372	153,588
Mississippi	198,569	208,454	51,875	54,432
Missouri	813,010	853,487	171,795	180,264
Montana	198,569	208,454	51,875	54,432
Nebraska	198,569	208,454	51,875	54,432
Nevada	215,306	226,025	56,247	59,020
New Hampshire	198,569	208,454	51,875	54,432
New Jersey	2,461,011	2,583,534	409,281	429,457
New Mexico	198,569	208,454	51,875	54,432
New York	4,997,493	5,246,297	871,467	914,428
North Carolina	593,830	623,394	155,134	162,782
North Dakota	198,569	208,454	51,875	54,432
Ohio	1,710,750	1,795,921	410,974	431,234
Oklahoma	320,052	335,987	83,612	87,733
Oregon	359,506	377,404	87,669	91,990
Pennsylvania	2,218,797	2,329,261	444,961	466,897
Rhode Island	198,569	208,454	51,875	54,432
South Carolina	337,161	353,947	88,081	92,423
South Dakota	198,569	208,454	51,875	54,432
Tennessee	524,150	550,245	136,931	143,681
Texas	3,373,131	3,541,065	702,076	736,686

State	Section 5303		Section 5313(b)	
	Metropolitan planning		Statewide planning	
	Actual apportionment fiscal year 2000	Guaranteed funding fiscal year 2001	Actual apportionment fiscal year 2000	Guaranteed funding fiscal year 2001
Utah	311,831	327,355	81,464	85,480
Vermont	198,569	208,454	51,875	54,432
Virginia	1,109,510	1,164,748	236,432	248,088
Washington	884,320	928,346	198,465	208,249
West Virginia	198,569	208,454	51,875	54,432
Wisconsin	619,141	649,965	152,162	159,663
Wyoming	198,569	208,454	51,875	54,432
Puerto Rico	538,076	564,864	131,205	137,673
Total	49,642,128	52,113,600	10,374,946	10,886,400

TRANSIT PLANNING AND RESEARCH

Question. Please provide a list by activity and amount of the earmarks contained in TEA–21 that must be administered under the FTA's transit planning and research account in fiscal year 2001. Are there any TEA–21 project earmarks under the national research and technology program for fiscal year 2001?

Answer.

Earmarks Contained in TEA–21 Administered under the FTA's Transit Planning and Research Account in Fiscal Year 2001

[In thousands of dollars]

Activity	*Fiscal year 2001 Amount*
Metropolitan Planning	52,114
Statewide Planning and Research	10,886
Transit Cooperative Research Program	8,250
National Transit Institute	4,000
Rural Transit Assistance Program	5,250
National Research and Technology	29,500
SEPTA Advanced Propulsion Control	[1] [3,000]
Project ACTION	[1] [3,000]

[1] These projects are earmarked in TEA–21.

The SEPTA Advanced Propulsion Control project and Project ACTION must be administered under the national research and technology program for fiscal year 2001.

Question. If FTA had a constrained budget for the national research and technology program, how would the agency allocate non-TEA–21 mandated programs with a discretionary allowance of $12,000,000?

Answer. FTA has requested $23,500,000 for non-TEA–21 mandated programs in fiscal year 2001. If only $12,000,000 were made available for use at FTA's discretion, we would allocate it to the following non-TEA–21 programs, as follows:

[In thousands of dollars]

Program	Fiscal year 2001 request	Constrained level
9.2. National Transit Database	2,500	2,500
1.5.1. Safety & Security Training (includes Transportation Safety Institute)	1,300	1,300
1.1.1. Grade Crossing Safety	750	750
1.5.5.2. SAMIS	400	400
1.5.5.3. Drug and Alcohol Testing Information System (DAMIS)	1,000	1,000
1.5.6. Safety & Security Clearinghouse and Web Site	200	200
1.5.13. Transit Accident Causal Factors	300	300
1.4. Implementation of FTA Safety Task Force Recommendations	1,000	1,000
1.5.10. Joint Use/Safety Certification	200	200

[In thousands of dollars]

Program	Fiscal year 2001 request	Constrained level
1.5.2. Safety & Security Training Course Development	200	200
1.5.3. Drug and Alcohol Testing: Updated guidelines and newsletters	250	250
1.5.12. Safety & Security Preparedness Planning and Drills	200	200
1.5.11. Safety Awareness Outreach	200	200
1.5.9. Fire Materials Testing	100	100
4.6. National Rural Transportation Assistance Program	750	750
5.2. FTA Internet Website	200	200
4.1. Job Access Support and Study	250	250
7.5. Financial Planning	200	200
3.3.4. BRT Project Administration	600	600
6.1. Transit Conditions, Performance and Needs	200	200
7.2. New Starts Planning and Project Development	550	550
3.3.2. BRT Data Collection & Analysis	500	500
2.5.1.3. Transit Construction Roundtable	80	80
6.3. Innovative Financing	200	70
Subtotal	12,130	12,000
7.1. Transportation Planning and Programming	750	.....
3.3.1. BRT Design & Operational Parameters, Impacts	300	.....
8.1. Support for Title VI/Environmental Justice	400	.....
6.5. Nationwide Personal Transportation Survey	500	.....
7.3. Land Use and Environmental Planning	200	.....
3.3.6. BRT: Professional Development Workshops—Design, Vehicle Systems, Services, System	200	.....
9.3. Program Evaluation and Strategic Planning (GPRA)	200	.....
7.4. Planning Methods	500	.....
3.3.3. BRT Systems Integration Workshop	250	.....
6.4. Global Climate Change	500	.....
3.3.5. BRT: Technology Transfer	200	.....
6.2. Benefits of Transit	100	.....
3.3.7. BRT: Lessons Learned Workshop	150	.....
5.3 Documentation and TRB Support	200	.....
5.1.Computer Automation	400	.....
2.5.1.1. Turnkey Demonstration Program	400	.....
2.1.1. Advanced Technology Buses: Small Heavy-Duty Bus and Advanced Bus Technologies	1,820	.....
2.4.1. Rail Communications-Based Subsystem Deployment	1,000	.....
8.2. Garrett A. Morgan Trans. Tech. Program	200	.....
10.1.International Mass Transportation Program: Technical Assistance and Training	500	.....
2.3.1. Hybrid Propulsion System Development and Deployment	2,000	.....
9.1. National Transit GIS	200	.....
5.4. Small Business Innovative Research	400	.....
Total	23,500	12,000

NATIONAL RESEARCH EARMARKS

Question. Please explain the difference between enacted funding levels for congressionally designated national planning and research projects in Public Law 106–69 and the fiscal year 2000 funding levels displayed for these projects in the 2001 budget justification.

Answer. Section 301(a) of the fiscal year 2000 Consolidated Appropriations Act (Public Law 106–113) rescinded discretionary budget authority Government-wide. To accommodate the reduced budget authority, FTA reduced funding levels for congressionally designated national planning and research projects, other than those dealing with Safety and Security, by 1.15 percent.

Question. For each of the congressionally designated programs and projects in the fiscal year 2000 appropriations bill under "Transit Planning and Research", please note when the grant, contract, or cooperative agreement was released and note who the official grantee agency or entity is in each case.

Answer. The official recipient for each project and release dates are indicated in the following table.

Programs and activities	Fiscal year 2000 amount	Release date	Official recipient
Transit Cooperative Research Program	$8,250,000	Not yet released	National Academy of Sciences/TRB.
National Transit Institute	4,000,000	Not yet released	Rutgers University
National Research and Technology:			
Zinc-air battery bus technology demonstration	988,492	Not yet released	Electric Fuel Corporation.
Washoe County, Nevada transit technology	1,235,616	Not yet released	Regional Transportation Commission of Washoe County.
Massachusetts Bay Transportation Authority advanced electric transit buses and related infrastructure	1,482,739	Not yet released	Massachusetts Bay Transportation Authority.
Palm Springs, California fuel cell buses	988,492	4/5/2000	SunLine Transit.
Gloucester, Massachusetts intermodal technology center	1,482,739	Not yet released	Massachusetts Bay Transportation Authority.
Southeastern Pennsylvania Transportation Authority advanced propulsion control system	2,965,477	Not yet released	Southeastern Pennsylvania Transportation Authority.
Project ACTION	2,965,477	4/10/2000	Easter Seals Project Action.
Advanced transportation and alternative fuel technology consortium (CALSTART)	3,212,600	4/6/2000	Westart-CALSTART, Inc.
Hennepin County community transportation, Minnesota	988,492	Not yet released	Hennepin County Regional Railroad Authority
Electric vehicle information sharing and technology transfer program	741,369	Not yet released	Chattanooga Area Transit Authority.
Portland, Maine independent transportation network	494,246	2/29/2000	Independent Transportation Network.
Wheeling, WV mobility study	247,124	Not yet released	Ohio Valley Regional Transportation Authority.
International program	988,492	Not yet released	To be determined.
Transit Safety and Security Training	1,200,000	3/13/2000	Transportation Safety Institute.
Safety and security programs	4,250,000	Not yet released	Various recipients.
Santa Barbara Electric Transit Institute	494,246	Not yet released	Santa Barbara Electric Transit Institute.
Pittsfield economic development authority electric bus program	1,334,465	Not yet released	Pittsfield Economic Development Authority.
Citizens for modern transit, Missouri	296,548	Not yet released	East-West Gateway Coordinating Council.

Question. Why is FTA requesting bill language that provides $750,000 from the national research and technology program to the Rural Transportation Assistance Program, which already has a guaranteed funding level of $5,250,000?

Answer. Rural Transportation Assistance Program (RTAP) includes $5.25 million in guaranteed funding distributed by formula. In addition, historically FTA has funded a national component of $750,000 from National Research funding. The $5.25 million is apportioned to all states using the Nonurbanized Area Formula Grants program formula. The $750,000 was used to fund the national portion of RTAP that supports rural operators by providing technical assistance and training. In fiscal year 2000, the available funding that was unearmarked in the National Research Program was insufficient to permit funding of the national portion of RTAP. Thus, FTA set aside 10 percent of the RTAP program funding to fund the national component of the program at a reduced level of $525 thousand. The result was that both the grant and national portions were reduced. Our proposal for bill language is intended to ensure that both portions of RTAP, crucial to rural public transportation, are funded at historic and statutory required levels.

SAFETY AND SECURITY ACTIVITIES

Question. The FTA has requested a total of $6,100,000 for safety and security activities and products in fiscal year 2001. Please reproduce the funding breakout table on page 150 of the justification, noting the priority order of each of the 13 activities planned for fiscal year 2001.

Answer. The table listing the priority of the fiscal year 2001 safety and security activities follows.

[Dollars in thousands]

Program: FTA 1 Safety and Security	Fiscal year 2001 amount	Priority order
Key Activities and Products		
1. Safety and Security:		
A. Technology	1,750	.....
1.1 Railroad Grade Crossing Safety:		
1.1.1. Grade Crossing Safety: Operational test and evaluation	750	2
1.4 Implementation of FTA Safety Task Force Recommendations	1,000	7
B. Training and Technical Assistance	4,350	.....
1.5.1. Safety & Security Training (includes Transportation Safety Institute)	1,300	1
1.5.2. Safety & Security Training Course Development	200	9
1.5.3. Drug and Alcohol Testing: Updated guidelines and newsletters	250	10
1.5.5.2 SAMIS	400	3
1.5.5.3. Drug and Alcohol Testing Information System (DAMIS)	1,000	4
1.5.6. Safety & Security Clearinghouse and Web Site	200	5
1.5.9 Fire Materials Testing	100	13
1.5.10 Joint Use/Safety Certification	200	8
1.5.11 Safety Awareness Outreach	200	12
1.5.12 Safety & Security Preparedness Planning and Drills	200	11
1.5.13. Transit Accident Causal Factors	300	6
Total Budget Authority	6,100	.....

Question. Of the activities requested within the safety and security area, which are directly supported by or in response to NTSB recommendations?

Answer. In fiscal year 2001, FTA will undertake implementation of recommendations resulting from the congressionally mandated review of the National Transit Database and its component safety and security data. The NTSB's recommendations regarding the development of accident causal data will be addressed as part of that activity. In addition, NTSB's recommendations concerning materials toxicity and flammability will be addressed in phase II of a project to improve fire safety standards for interior materials of transit vehicles.

RAILROAD GRADE CROSSING ACTIVITIES

Question. How is FTA's railroad grade crossing technology demonstration and evaluation program coordinated with similar efforts by the Federal Railroad Administration? Please list technologies that have been tested or deployed by this program in the past two years, and those technologies that FTA intends to explore with the fiscal year 2001 funding.

Answer. The FTA coordinates its grade crossing activities through the USDOT Highway Rail Grade Crossing Team, an intermodal team of professionals from the FTA, FHWA, FMCSA, FRA, and NHTSA that was formed as the Department's response to the tragic grade crossing accident in Fox River Grove, Illinois, in the early 1990's. This team meets periodically to discuss and share information on innovative grade crossing technologies and outreach initiatives to enhance safety along the Nation's highway grade crossings. The following table lists grade crossing technologies that have been evaluated during the past two years.

Project No. and title	Abstract	Grantee and/or consultants
MA–03–7001, Four Quadrant Gated Grade Crossing.	Evaluate design and operational standards/safety enhancements for commuter rail grade crossings. Demonstrate use of four quadrant gates with vehicle detection system at commuter rail grade crossing..	Massachusetts Bay Area Transportation Authority.
MD–26–7024, Second Train Coming Warning Sign.	Develop & evaluate use of active 2nd train warning sign for motorists at light rail grade crossings. The warning sign will alert motorists who are stopped at the crossing that a second high-speed train is coming from the opposite direction..	Mass Transportation Administration, Baltimore, MD.
CA–26–7017 Second Train Coming Warning Sign.	Develop & evaluate use of graphic 2nd train sign for pedestrians at rail grade crossings. This project is in conjunction with MD–26–7024, and will include field study of an active warning sign..	Los Angeles County Metropolitan Transportation Authority.
CA–26–7010, Assessment of Left Turn Crossing Gates for LRT.	Field test and technical studies to investigate left turn railroad crossing gated for light rail transit (LRT) grade crossings. Field test to include evaluation of track area vehicle detection systems..	Los Angeles County Metropolitan Transportation Authority.

In fiscal year 2001, the FTA intends to explore the integration of advanced intelligent transportation system (ITS) technologies at highway-rail intersections (HRI) along light rail and rapid rail lines. A USDOT ITS-HRI team has been convened and is developing strategies for deployment of advanced grade crossing safety technologies. The FTA has also identified a number of potential projects for fiscal year 2001.

—*Train Approach Warning at Stations.*—Sacramento Regional Transit District: Since the light rail system began operation in 1986 there have been 32 collisions between pedestrians and light rail vehicles. Nineteen of the incidents have occurred in the immediate vicinity of light rail stations. Almost all of these incidents have involved persons whose judgement was impaired by drugs, alcohol, physical disability, emotional disability, or developmental disability. The diminished ability to quickly detect or avoid harm cannot entirely be ruled out as causal factors in these incidents. The annunciation of the approach of a train may provide the additional information necessary for people to recognize the hazard or extra time to move out of the path of travel. This project will involve the installation of visual and audible warning devices in the station areas that would activate in advance of the train warning. They need to be easily accessed and understood by the disabled community. These devices will utilize Train to Wayside communication to prompt the station annunciation.

—*Advanced Four Quadrant Gate Detection with In-Cab Alert Systems.*—LACMTA: This project will consist of a four quadrant gate system with vehicle detection and an in-cab alert system that would inform the train operator if a motorist was stopped or stalled on the tracks at the Greenleaf Boulevard crossing in the City of Compton, California. Most recently, there was a tragic collision at this crossing that resulted in six fatalities. Although the crossing is equipped with photo enforcement camera equipment, it is clear that additional improvements are needed if collisions are to be eliminated at this crossing. Upon receiving an alarm in the cab with a vehicle stopped on the tracks, the operator would start braking and slowing the train with the intent of avoiding a collision. The in-cab alert system would be particularly beneficial for crossings where the visibility for train operators is limited because of curves in the track geometry, obstructions at crossings, bad weather conditions, and operations at night or at

crossings where there is insufficient street lighting. This project has elements that duplicate the Los Angeles County Transportation Authority's (LACMTA) four quadrant gate project currently under evaluation and other four quadrant gate projects being done elsewhere. However, it is significantly different because of the in-cab alert system being proposed plus differences in the street geometry and traffic conditions at the Greenleaf Boulevard crossing.

—*Magnetic Pedestrian Gates.*—Los Angeles County Transportation Authority (LACMTA): A second proposed project, targeted only for pedestrians, is the installation and evaluation of a magnetic pedestrian gate. Recently, the Metro Blue Line has experienced a high number of pedestrian related accidents. Most of these accidents have occurred in the corridor where LRTs operate at speeds of up to 55MPH and share the corridor with the Union Pacific freight railroad. This system when installed at the demonstration location will provide a positive barrier to control pedestrian traffic across the tracks. As a train approaches the crossing, an alarm will sound followed by the gate closing to prevent pedestrians from crossing the tracks, and at the same time open an escape path allowing pedestrians already in the track area to safely exit. Once the train passes the crossing, the gate will automatically open giving access to the pedestrian walkway. This type of a system has the potential of being more effective than passive and even active warning signs because it requires a conscious effort on the part of pedestrians to ignore and circumvent the gate.

The resurgence of light rail transit and popularity of commuter railroads across the United States brings concerns related to highway-rail intersection safety that are shared by safety professionals and planners. As more and more transit agencies begin new operations and reenergize existing systems in mixed traffic corridors, the issue of how to safely commingle the different transportation modes becomes important and requires urgent attention. Although the behavior of some motorists and pedestrians at grade crossings is incomprehensible, transit agencies are implementing measures that go above and beyond industry standards to reduce the number of accidents and fatalities that occur at rail crossings. The projects briefly described above have the potential of reducing these types of accidents thus decreasing the number of injuries and fatalities and meeting the FTA and USDOT strategic goals on safety.

Question. The Committee is aware of FTA's and FRA's joint work on developing agency policy on shared use of the general railway system by conventional railroads and transit systems. Please outline the status of this policy's development, summarize the principle issues and questions, and describe how the requested funds would be spent.

Answer. There has been extensive discussion in the transit industry with regard to the construction and operation of light rail transit systems on railroad rights-of-way. This concept of "shared use" or "shared corridor" involves use of an owner railroad's land as differentiated from "shared track" in which instance transit vehicles are operated on a portion of the general railroad system.

The safety concerns relevant to transit vehicles operating on exclusive tracks but adjacent and parallel to railroad tracks are minimal compared to shared track operations in which circumstance it is necessary to maintain absolute physical separation between vastly disparate vehicles (railroad locomotives and freight cars versus light weight, streetcar-like rail transit vehicles).

The principal, and perhaps singular, safety concern in shared corridor is the possibility of a derailment which might result in the intrusion of a railroad train, or transit vehicle, into the path of a dissimilar train or vehicle. This circumstance is best addressed through appropriate design of the transit alignment to minimize, if not eliminate, the probability of any derailment intrusion.

To that end, FTA is directing that our Project Management Oversight process assures that, insofar as shared corridor is concerned, risk assessment and hazard analysis is performed and that the preliminary engineering effort results in designs which are acceptable to the transit agency, the owner railroad and the State Safety Oversight agency. FTA is proposing to amend its State Safety Oversight rule to require state oversight at the preliminary engineering stage, and thereafter, of rail fixed guideway transit projects.

The public comment period for the FTA/FRA Statement of Joint Policy and FRA's Statement of Agency Policy ended on February 17th. FTA is currently reviewing comments on the Statement of Joint Policy and expects that a final version will be released in the next few months.

Conclusions drawn from the public comments will, along with other agency considerations, determine the course that FTA will undertake in implementing this policy. The funds requested will be used to provide technical assistance to transit agencies planning joint trackage and shared corridor use. Compliance guidelines are now

being developed for these situations. FTA will assist with and encourage coordination between local planning organizations, transit agencies and their engineering consultants, involved owner railroads and the FTA's project management oversight contractors and field engineering staff.

Additionally, FTA intends to undertake studies of signaling and operational practices to enhance the safety of joint trackage operations and design standards for intrusion detection or prevention in shared corridor situations.

EQUIPMENT AND INFRASTRUCTURE ACTIVITIES

Question. The FTA has requested a total of $8,300,000 for equipment and infrastructure activities in fiscal year 2001. Please reproduce the funding breakout table on page 157 of the justification, noting the priority order of each of the 6 activities planned for fiscal year 2001. Are any of these projects earmarked in TEA–21?

Answer. Below is the funding breakout table noting the priority order of each of the 6 activities planned for fiscal year 2001. Of these activities the SEPTA Advanced Propulsion Control System project is earmarked in TEA–21.

[Dollars in thousands]

Program: FTA 5 Research and Technology Program Support	Program Schedule			Priority
	Fiscal year			
	1999	2000	2001	
Key activities and products				
2. Equipment & Infrastructure:				
2.1. Bus Technology Development	$6,000	$9,243	$3,820	.....
2.1.1. Advanced Technology Buses: Small Heavy-Duty Bus and Advanced Bus Technologies	.....	.....	1,820	3
2.2.2. Palm Springs, CA Fuel Cell Buses	1,000	989	.....	.....
2.3.1. Hybrid Propulsion System Development and Deployment	.....	.....	2,000	5
2.3.1. Santa Barbara Electric Transportation Institute	500	494	.....	.....
2.3.2. Advanced Transit Systems & Electric Vehicle Program CALSTART	1,500	3,213		
2.3.3. MBTA Advanced Electric Transit Buses & Related Infrastructure	1,500	1,483		
2.3.4. Zinc Air Battery Research	1,500	989	.....	.....
2.3.5. Electric Vehicle Information Sharing and Technology Transfer Program	.....	741	.....	.....
2.3.6. Electric Vehicle Information Sharing and Technology Transfer Program	.....	1,334	.....	.....
2.4. Rail Equipment and Systems	3,750	4,449	4,480	.....
2.4.1. Rail Communications-Based Subsystem Deployment	.....	.....	1,000	4
2.4.2. SEPTA Advanced Propulsion Control System	2,000	2,966	3,000	6
2.4.3 Gloucester, MA Intermodal Technology Center	1,500	1,483	.....	.....
2.4.4. Vegetation Control on Rail Rights-of-Way Survey	250	.....	.....	.....
2.5.1.1. Turnkey Demonstration Program	.....	.....	400	2
2.5.1.3. Transit Construction Roundtable	.....	.....	80	1
Total Budget Authority	9,750	13,692	8,300	

Question. Is FTA on track to complete the turnkey demonstration program in fiscal year 2001? What activities will be supported with the $400,000 requested in fiscal year 2001?

Answer. FTA will continue project monitoring and evaluation activities through 2003. Two of the five turnkey demonstration projects are completed, and the Hudson-Bergen Light Rail Line will open in April of 2000. The remaining two projects will become operational in 2002 (Tren Urbano) and 2003 (BART extension to San Francisco International Airport).

Since each of the three active Turnkey Demonstration Projects exceed $1 billion in construction funds, there is justification to gain technical knowledge outside the normal oversight process. This includes monitoring, data collection, reporting, and evaluation. A minimum level of contracted technical analysis effort for these tasks is estimated at one professional person-year per year of the projects' implementation schedule, plus a subsequent year for the evaluation of systems operation in the cases of the San Juan and New Jersey projects. Therefore the Turnkey Demonstration Program will require about $400,000 annually for documentation and evaluation. In addition, the Turnkey Demonstration Program requires funds to conduct special studies on key issues of concern to FTA and a related industry workshop. One example of an outstanding issue is the level of engineering that must be completed before a turnkey contract is awarded.

Question. How will FTA's rail communication-based subsystem deployment program be coordinated with similar efforts by the Federal Railroad Administration? Who are the participants in the Joint Partnership Program?

Answer. Regarding coordination with the Federal Railroad Administration (FRA), the FTA expects, as part of the rail communication-based subsystem deployment program, to coordinate technology development and deployment activities with FRA through joint meetings, program reviews, and by leveraging similar FRA research, development, and deployment efforts. The Transit Cooperative Research Program (TCRP) is one mechanism currently used by FTA to coordinate with similar efforts by FRA. For example, FTA is participating in TCRP Project D–7—Joint Rail Transit Related Research with the Association of American Railroad's Transportation Technology Center, Inc. (TTCI). This project will benefit the transit industry by leveraging research already being performed by the FRA at the TTCI in the areas of broken rail detection, transit switch design evaluation, rail welding techniques, and wheel/rail friction control techniques. FTA has identified broken rail detection as one of the key areas where further technology development is necessary for the widespread deployment of Communication-based Train Control (CBTC) technology. FTA will continue to seek other mechanisms to use in order to fully coordinate with FRA.

Regarding participants in the Joint Partnership Program (JPP), FTA received thirty-one applications in response to a Federal Register solicitation dated October 2, 1998. One of the highly ranked applications was submitted by a team of Harmon Industries and the San Francisco Bay Area Rapid Transit District (BART). The application proposed to develop technology in several key areas in order to facilitate the widespread deployment of CBTC technology. These areas are: broken rail detection using alternate technologies, silent train detection, accurate programmed stop/train position technology development, remote interface development, and development of advanced control algorithms.

FTA intends to use the fiscal year 2001 funding to develop and deploy advanced broken rail detection technology. In addition to BART and Harmon, team members would include: Penn State University, Sandia National Laboratory, Lawrence Livermore National Laboratory, and the Texas Transportation Institute.

Question. What is the current status and cost to complete the Georgetown University fuel cell bus program?

Answer. In 1997, the Federal Transit Administration (FTA) program was scaled back to develop only two fuel cell buses, one with a phosphoric acid fuel cell (PAFC) and one with a proton exchange membrane fuel cell (PEMFC). This was a prudent decision at the time since it was not clear which technology might better satisfy the transit bus marketplace.

The PAFC bus development is complete. The fuel cell power plant was fabricated, tested and integrated into a 40-foot Nova BUS platform. Lockheed Martin Control Systems (LMCS) provided the power and propulsion system (the same design that is being used on the hybrid-electric buses in New York City). Emission testing of this vehicle will take place in the spring of 2000, and the FTA plans to schedule a congressional demonstration of the PAFC transit bus shortly thereafter.

The FTA has structured a Memorandum of Agreement (MOA) with Georgetown University (GU) to define the total program, schedule, end products and funding requirements for the Fuel Cell Transit Bus Program. It also includes the Intermodal Fuel Cell Transit Bus Maintenance Facility so that the total Fuel Cell Transit Bus Program activities are defined in a single document. The Fuel Cell Transit Bus Program contains the following elements:

—A total of eight fuel cell transit buses (includes the two currently completing development)

—Fuel cell power plants provided by up to two fuel cell vendors

—Remaining six fuel cell transit buses to be developed will be non-hybrid (no batteries—200 kW fuel cell power plants)

—Testing and training at GU and at various transit agencies in cooperation with the FTA.

The cost to complete the fuel cell transit bus program beyond the $51 million in funding provided through fiscal year 2000 is $20.8 million.

Currently, all endeavors for transportation are now dedicated to the PEMFC technology. This is being driven by industry support for adapting PEMFC for automotive application. Fuel cell bus power plants will scale the automotive fuel cells to bus requirements by coupling the smaller units to increase power. FTA's first PEMFC bus employs two DaimlerChrysler 50 kW automotive power plants to achieve the 100 kW power level.

On a positive note, incorporating automotive technology should greatly reduce the production cost of future bus fuel cells since production levels will be much higher to meet the automotive demand.

One key lesson learned to date is that combining fuel cell and battery technology into a hybrid configuration cannot meet the commercial goals established for this program. Such buses are too heavy and complex to satisfy the industry needs. Larger fuel cell power plants are mandatory. Automotive power plants are now sized at 60 kW. A non-hybrid 40-foot transit bus requires approximately 200 kW of power. Although additional fuel cell stacks can be combined, non-recurring engineering is needed to develop a responsive fuel processor to convert the liquid methanol into the hydrogen-rich gas to feed the stacks.

There is interest within the Department of Defense to investigate the use of fuel cells for Army land vehicle applications. The Tank Automotive Command's National Automotive Center (NAC) funded a concept study on the applicability of PEMFC power plants for various types of Army trucks. The power levels of these vehicles are close to the fuel cell power plants (200 kW) being developed for the next PEMFC bus. The ability to operate on liquid fuel is paramount for military applications although eventually a logistic military fuel (diesel or JP–8) would have to be used. The NAC may be willing to participate in the next fuel cell bus development to gain familiarity with the control schemes and operation of this class of vehicle.

The 100 kW PEMFC power plant has been fabricated, tested and integrated into a 40-foot Nova BUS platform. To our knowledge, this is the largest PEMFC in the world that can operate on liquid fuel. In January 2000, the bus was on exhibit just outside a hearing held by the California Air Resources Board (CARB) to consider stringent new emission standards for urban buses. At this time, the PEMFC power plant is being tested for compatibility with other bus subsystems. Following that, the bus will be sent to LMCS to fine-tune the electric drive train. A public debut is planned for the American Public Transportation Association Bus Technology Conference in Houston in May 2000.

The fuel cell power plants and the propulsion system are designed to be integrated into any bus platform once the design and development process is completed. The issue is a commitment from a fuel cell manufacturer to manufacture and mass-produce the fuel cell transit buses.

Two key factors are involved. First, the demand for fuel cell transit buses will not exist until the transit agencies are assured that the technology is viable and the buses meet the transit industry requirements. This is the very reason that the MOA was structured to produce sufficient vehicles to address this critical issue.

The current fuel cell vendors for the FTA program are XCELLSiS (Daimler Chrysler majority owner) and International Fuel Cells (division of United Technologies Corporation). Both are investing millions of dollars to bring a fuel cell power plant to the automotive marketplace. Daimler Chrysler is committed to producing a commercial fuel cell bus by 2004. The FTA Fuel Cell Transit Bus Program will incorporate multiple automotive fuel cell power plants to meet the transit industry power requirements. Thus, bus power plants can be built with the automotive economies of scale for production hardware. However, it is still vital to develop and integrate these larger fuel cell power plants into actual transit buses to address scale-up and control issues, as well as to demonstrate resulting performance to the transit community.

The projected acquisition costs of a fuel cell transit bus have yet to be established but there are approaches to make realistic estimates. First, it must be recognized that the rather small transit bus market (3,000–4,000 vehicles per year) will not generate economies of scale sufficient to drive cost reduction. Assuming that fuel cell buses capture 10 percent of the transit bus market (a reasonable assumption where transit agencies in air quality non-attainment areas may see this technology as absolutely essential to meeting Federal or local guidelines), then production numbers would be approximately 400 fuel cell transit buses per year. This may seem a very small number, but it is eight times more than the annual production rate of utility fuel cell power plants.

The Partnership for a New Generation of Vehicles (PNGV) has established a cost goal of approximately $50 per kW in automotive production quantities. This would be cost competitive with current internal combustion engines. If the fuel cell can be produced for $500 per kW (ten times greater then the PNGV goal), then a 200 kW power plant would cost about $100,000. The electric drive train costs may add another $40,000 to the total bus cost. The current diesel engine/transmission combination costs about $65,000. If those cost projections were attained, the acquisition cost premium of a fuel cell bus would be $75,000. Thus a fuel cell bus would cost $325,000 versus approximately $250,000 for a typical diesel bus.

The transit industry is buying thousands of Compressed Natural Gas (CNG) transit buses to meet air quality standards. The CNG buses cost about $320,000 and do not come close to the environmental benefits of the fuel cell bus. It should be noted that DaimlerChrysler expects manufacturing costs of fuel cell power plants to be less than those of internal combustion engines based upon the manufacturing processes involved. If true, the fuel cell bus acquisition cost could approach that of today's diesel bus.

Question. What transit agencies are currently testing or have given firm commitments to acquire the Georgetown University fuel cell/hybrid electric buses?

Answer. There is insufficient experience to date with fuel cell transit buses to convince any transit agency of the technology readiness, operational benefits, or vehicle performance needed for practical fleet implementation. Additional vehicles, demonstrations and evaluations are absolutely essential to meet this objective. Several agencies, including Chicago Transit Authority and SunLine Transit Agency in Palm Springs, have expressed interest in the technology. They are waiting to see the result of the non-hybrid (200 kW) fuel cell transit bus development, the vehicle upon which procurement decisions can be made. Towards that end, the Memorandum of Agreement with Georgetown University established a Transit Review Committee (TRC) comprised of interested transit agencies to review the Fuel Cell Transit Bus Program. The objective of this review committee is to ensure that fuel cell buses, maintenance and training satisfy the operational requirements of the transit industry. Recommendations of the TRC will help guide the Fuel Cell Transit Bus Program. The TRC meets twice a year in conjunction with the APTA Annual Meeting and the Bus Technology Conference.

BUS RAPID TRANSIT

Question. What is the total amount allocated to bus rapid transit activities in fiscal years 1999, 2000, and planned for fiscal year 2001? What are the out-year costs associated with this program?

Answer. The table below indicates funds allocated to the BRT program in fiscal year 1999, fiscal year 2000, and planned for fiscal year 2001.

Activity	Fiscal year		
	1999	2000	2001
BRT Design and Operational Parameters, Impacts	$150,000		$300,000
BRT Data Collection & Analysis	250,000		500,000
BRT Systems Integration Workshop	200,000		250,000
BRT Project Administration	500,000		600,000
BRT Technology Transfer	100,000		200,000
BRT Professional Development	200,000		200,000
BRT Lessons Learned Workshop	100,000		150,000

Technology transfer of lessons learned and professional development will continue to dominate the out-year costs through 2004. BRT projects initially implemented in 2002 and 2003 will need to be monitored and evaluated at least through 2004. As experience is gathered from these projects and the important lessons learned are identified, this information will be disseminated through BRT seminars, workshops and reports. For example, BRT Professional Development will be enhanced through knowledge gained regarding the cost and performance of specific subsystem elements suitable for integration into a cohesive BRT system. Findings from BRT demonstration projects and cross-cutting documentation that compares multiple projects and draws general conclusions will encourage replication of the BRT concept at other sites. These information sources can be developed only after a BRT project is implemented and operational. The lessons learned from BRT projects implemented in 2002 and 2003 won't be fully documented until 2004.

Question. Were BRT demonstration projects selected and announced in 1999? Please list the selected agencies, and provide a brief description of each BRT project and its associated schedule and budget. What federal funding options are available to these projects? If the projects have received discretionary federal funding in the past two years, please note the amount of funding, when it was appropriated, and the type of funding.

Answer. In 1999 seventeen sites were selected to participate in FTA's BRT Program. Ten agencies were selected as demonstration sites, and another seven agencies whose BRT projects were still in the concept or early planning phase, were se-

lected as other members of a BRT Consortium. These projects could be funded through the New Starts Program, the Bus Discretionary Program or the Formula Program.

Of the ten demonstration sites the Eugene-Springfield, Oregon site has received Capital Investment Sec. 5309 Bus funding of $4.4 million and $4.3 million in fiscal year 1999 and fiscal year 2000, respectively. In addition, the Dulles Corridor, Virginia site has also received Capital Investment, Sec. 5309 New Starts funding of $16.9 million and $24.5 million in fiscal year 1999 and fiscal year 2000, respectively.

Descriptions of the ten demonstration sites follow:

Boston, MA.—The Massachusetts Bay Transportation Authority's 3.8-mile "Silver Line" on Washington Street will run to and through downtown to the South Boston Piers and Logan Airport.

Status: Section A is expected to be completed in December 2002. Section B is expected to be in construction this spring. Section C is in the initial design phase with an expected completion date of December 2008.

Charlotte, NC.—The City of Charlotte's Independence Corridor will add to its exclusive busway in the median of Independence Boulevard. This project potentially could be 13.5 miles long.

Status: The project is viewed as an element of a countywide, five-corridor rapid transit system that should promote land use objectives in addition to providing travel time savings. The approach is to plan the entire corridor project with the Phase II busway project being defined as part of the Major Investment Study (MIS) for the Independence Boulevard transit corridor. The MIS process is currently underway. A consultant team of both land-use and transportation experts has been selected to prepare the MIS for the 13.5-mile corridor. Contract negotiations are expected to be completed and work in the corridor begun.

Cleveland, OH.—The Greater Cleveland Regional Transportation Authority proposes to rebuild a 5.0-mile section of Euclid Avenue to provide for exclusive transit lanes and a beautified avenue with landscaping and transit shelters.

Status: Currently, the Euclid Corridor BRT is proceeding with the preliminary engineering effort. It is expected that the project will enter Final Design in July 2000 and begin construction in mid-2002. Opening day for the Euclid Corridor BRT is scheduled to occur in 2005. The environmental review process is being conducted in conjunction with the preliminary engineering effort and an environmental finding is expected to be issued in May 2000.

Dulles Corridor, VA.—The Virginia Department of Rail and Public Transportation proposes BRT as an intermediate phase to the extension of Metrorail in this 22-mile corridor. BRT would operate mainly on the Dulles Airport Access Road stopping at median stations which would be converted to rail stations.

Eugene-Springfield, OR.—The Lane Transit District proposes to implement BRT in a variety of exclusive lane configurations on a 10-mile pilot corridor in Eugene and Springfield.

Status: Lane Transit District is pursuing an east-west pilot corridor in Eugene-Springfield. The pilot corridor has been divided into three phases for planning, engineering and public involvement efforts. Phase 1 will operate between downtown Eugene and downtown Springfield. Project planning and preliminary engineering for Phase 1 has been completed, and environmental review is currently underway. Final approval of Phase 1 is anticipated by late summer 2000, and construction is scheduled for completion in late 2001 or 2002. Phase 2 extends west from downtown Eugene approximately 3 miles. Preliminary engineering has begun for Phase 2 of the project, with environmental review to follow late in 2000. Operation of Phase 2 is planned for 2003. Phase 3 extends east from downtown Springfield to Thurston Station, a major park and ride facility. Planning and engineering work for the final phase of the pilot corridor is expected to begin in 2001, and be operational within 3 years.

Hartford-New Britain, CT.—The Connecticut Department of Transportation has proposed a nine-mile, 12-station exclusive busway to be built on active and inactive rail right of way.

Status: Currently the project is in the Environmental Impact Study (EIS) phase. The EIS is being prepared to evaluate the environmental, social and financial impacts of the busway. Through the EIS the appropriate environmental approvals will be obtained. Also, the EIS is being used as the informational tool to educate and gain the support of the public.

Honolulu, HI.—The City and County of Honolulu has proposed a 12.6-mile system called "CityExpress!" with limited bus stops through the primary transportation corridor, using HOV lanes on Hawaii's H–1 freeway and downtown exclusive lane.

Status: CityExpress! started service in March 1999, initially between the Kalihi Transit Center and the University of Hawaii. The first day's ridership through this

6.8 mile route was about 1,300. In August 1999, CityExpress! expanded service to Pearlridge, adding an additional 6.0-miles to the route. Total travel time between Pearlridge and the University of Hawaii was formerly approximately one hour and twenty minutes; CityExpress! reduced this to forty-five minutes. Average daily ridership grew from 2,463 in March 1999 to 5,238 in December 1999. Daily weekday ridership generally exceeds 6,000. The average monthly ridership in Phase I was 83,500 and increased in Phase II to 126,500.

CityExpress! operates Monday through Saturday between 5:30 a.m. and 9:30 p.m. providing 8- to 10-minute headways between the Kalihi Transit Center and the University of Hawaii. Between Pearlridge and the Kalihi Transit Center, the service operates with 15- to 20-minute headways. A traveler information system will be installed at selected CityExpress! bus stops within the next few months. Signal prioritization capability is being installed aboard CityExpress! buses and will operate at five intersections along the route. Route map "Spinners" are being installed at CityExpress! bus stops to provide additional route information. Future phases will see CityExpress! expand beyond Pearlridge.

Miami, FL.—Metro-Dade Transportation Authority (MDTA) will extend its existing 8-mile, 15-station busway another eleven miles to Florida City, adding 22 new stations.

Status: A Notice to Proceed has been issued to a consultant for a work order on the "Busway/Grade Separation Analysis for the Bus Rapid Transit Demonstration Project". The analysis will include a study of three alternatives: an elevated structure, a depressed by-pass, and at-grade with warning devices and signals, as well as the selection of an intersection within Phase I of the project as the location for the selected alternative to be implemented. Regarding the South Miami-Dade Busway Extension to Florida City, the Florida Department of Transportation is continuing with right-of-way acquisition for Segment I. MDTA is working with Florida DOT and the County's Public Works Department on traffic signal issues critical to maintaining essential features of a BRT system, and a consultant has been assigned the task of preparing a Project Management Plan.

San Juan, Puerto Rico.—The Puerto Rico Highways and Transportation Authority (PRHTA) will operate fast shuttle service on a new 2.5-mile Rio Hondo connector linking the Bayamon Tren Urbano Station and the Rio Hondo Tren Urbano Plaza.

Status: PRHTA is working on Phase I of its work plan for development of Tren Urbano Plaza/Bus Rapid Transit. The purpose of the Phase I effort is to develop the plaza/BRT concept up to the beginning of final design. Phase I efforts include demand analysis, traffic engineering, operations planning, environmental impact assessment and permitting, land acquisition, and preliminary engineering. Current work is directed at refining the concept design for the plaza facility, operations planning for privatized operations of the bus service and plaza facilities, and traffic engineering for bus rapid transit operations.

Santa Clara County, CA.—The Santa Clara County Valley Transportation Authority (VTA) will improve operations on its 27-mile-long Line 22 in six cities: San Jose, Santa Clara, Sunnyvale, Mountain View, Palo Alto and Los Altos.

Status: Design is near completion on the first queue jump lanes (to be constructed on El Camino Real in Palo Alto and Los Altos). VTA is negotiating procurement of up to 40 articulated buses, to be delivered in the next 2 to 3 years, and working with Caltrans regarding the signal priority research project and other elements of research funded through the University of California, Berkeley. VTA is also beginning the definition of ITS elements specific to its fiscal year 2000 ITS earmarked project. This may include signal priority implementation and real-time information displays at bus stops.

Question. Please update last year's summary of the results of FTA's bus rapid transit research thus far. Have you developed preliminary scoping of the concept data, including cost per mile, land use parameters, efficiency measurements, and cost of operation?

Answer. The Bus Rapid Transit (BRT) program is progressing essentially as we described in last year's summary. These projects will require several years to implement. Data will then be collected on their operation so that conclusions can be drawn about their effectiveness and efficiency. The ten demonstration sites are at various stages of final planning or initial construction. The seven other Consortium members are moving toward defining and choosing alternative BRT configurations and initial planning.

Since last year, the focus has been on strengthening the Consortium as the primary means of sharing information and experience relating to BRT activities among its members and initiating BRT research sponsored by the Transit Cooperative Research Program (TCRP). There have been two successful workshops focusing on specific BRT issues for Consortium members. The first involved BRT Vehicle issues and

the second focused on BRT image and marketing. At the second workshop, research results were presented on internal and external design of buses and the relationship between buses and support facilities (stops, stations and terminals).

Workshops on BRT operational and infrastructure issues and fare collection are planned for this year. These workshops have attracted other cities that are interested in BRT and have resulted in several requests to join the Consortium.

Because these BRT projects have not entered the operational stage data pertaining to costs per mile for construction, land use impacts, costs of operation etc. are not yet available. The TCRP project will document current practice with BRT as has occurred in Curitiba, Brazil; Ottawa, Ontario; Orlando, Florida; and Pittsburgh, Pennsylvania.

RESEARCH AND TECHNOLOGY SUPPORT

Question. The FTA has requested a total of $1,200,000 for information management and technology activities in fiscal year 2001. Please reproduce the funding breakout table on page 178 of the justification, noting the priority order of each of the 4 activities planned for fiscal year 2001.

Answer. The following chart provides a funding breakout for information management and technology activities:

[Dollars in thousands]

Program: FTA 5 research and technology program support	Program schedule			
	Priority	Fiscal year		
		1999	2000	2001
Key activities and products				
5.1. Computer Animation	3	.....	.....	$400
5.2. Multi-Media Information: FTA Website	1	.....	$100	200
5.3 Documentation and TRB Support	2	.....	.....	200
5.4. Small Business Innovation Research	N/A (Statutory Program)	.....	.....	400
5.5. Technical Direction & Documentation of Research & Technology Projects	High	.....	.....	.....
Total Budget Authority	.....	.....	100	1,200

Although funds were not specifically requested for Key Activity 5.5, because they will be set aside as part of any project funded, it has a very high priority.

METROPOLITAN/RURAL POLICY DEVELOPMENT ACTIVITIES

Question. The FTA has requested a total of $1,500,000 for metropolitan/rural policy development activities in fiscal year 2001. Please reproduce the funding breakout table on page 182 of the justification, noting the priority order of each of the 5 activities planned for fiscal year 2001.

Answer. The following table lists the metropolitan/rural policy development activities for fiscal year 2001.

[Dollars in thousands]

Program: FTA 6 Metropolitan/rural policy development	Program schedule			
	Fiscal year			Priority
	1999	2000	2001	
Key activities and products				
6. Metropolitan/Rural Policy Development:				
6.1. Transit Conditions, Performance and Needs	$300	.....	$200	1
6.2. Benefits of Transit	.....	.....	100	5
6.3. Innovative Financing	100	.....	200	2
6.4. Global Climate Change	.....	.....	500	4
6.5. Nationwide Personal Transportation Survey	.....	.....	500	3

[Dollars in thousands]

Program: FTA 6 Metropolitan/rural policy development	Program schedule			
	Fiscal year			Priority
	1999	2000	2001	
6.8. City of Branson, Congestion Study	450	.....	.....	.....
Total Budget Authority	850	.....	1,500	.....

Question. Please update the Committee on the status of the fiscal year 1999 grant for the City of Branson, Missouri congestion study. Was this funding applied for and released?

Answer. The Missouri Department of Transportation submitted a grant application in February, 2000. The grant award is expected to be made in the third quarter of fiscal year 2000.

Question. What statutory requirement motivates the request for $500,000 to collect and analyze transit use and performance data related to global climate change?

Answer. There is no statutory requirement that directly links global climate change data with transit use and performance. However, 49 U.S.C. Sections 5301(b)(7) and 5301(e) establish the goals of improving energy efficiency and preserving the environment, and Section 5335(a) requires the Secretary to maintain a reporting system using uniform categories. While the categories that currently exist are useful for reporting basic levels of transit use in specific urbanized areas, they are not easily used to assess the impacts of varying levels of transit use, by mode, on local or regional emissions and accumulations of pollutants. These pollutants will differ according to vehicle type, fuel type, vehicle energy efficiency, occupancy level, and type of service (local vs. express).

The requested funding level would help to determine whether uniform categories of information could be developed to measure this effect and whether the resulting data could be incorporated with transportation models in use within the Department and in various urban areas around the country, to measure the effectiveness of transportation investments in reducing one or more environmental emissions, including emissions that may influence the global climate.

Question. Could the Bureau of Transportation Statistics assist FTA in data collection and management related to the Nationwide Personal Transportation Survey?

Answer. There is every reason to expect the Bureau of Transportation Statistics (BTS) to exercise increasing leadership in the collection and management of Nationwide Personal Transportation Surveys (NPTS). However, notwithstanding the importance of BTS, it is essential that FTA, along with the other transportation modes, provide independent financial and technical support for NPTS, so that their distinct data needs and priorities are effectively incorporated into the NPTS design and implementation.

Historically, FTA has used the Nationwide Personal Transportation Survey (NPTS) to examine the role of transit for households and cities. For many years, the NPTS data has enabled FTA to report on transit's share of travel in large and small cities, among demographic groups, and in different geographic regions. More recently, FTA has used NPTS data to measure the value of transit benefits in market niches not adroitly served by privately owned vehicles. This use of NPTS is demonstrated in a book supplied to the Committee in late 1999: Policy and Planning as Public Choice: Mass Transit in the United States, (1999) by D. Lewis and F.L. Williams. Unfortunately, as discussed below, a sharply increased effort will be necessary in the near future to maintain data comparable in quality to earlier NPTSs. Without the increased effort, FTA's ability to monitor transit's markets will be severely compromised.

Under Dr. Ashish Sen's leadership, the Bureau of Transportation Statistics (BTS) has greatly increased its financial support for and leadership in the NPTS process. BTS is poised to serve as the principal leader for the modernization of methods to gather and manage personal transportation data. Dr. Sen has voiced serious concern over the erosion of telephone survey validity by decreasing response rates, mostly due to intensive telemarketing efforts in recent years. Dr. Sen has also observed that decision makers are requesting more frequent and more quickly accessible travel data. FTA shares these concerns and FTA expects to work with BTS, FHWA, and other NPTS partners to develop more efficient and timely techniques to collect personal transportation data.

Initially, innovative data collection could be comparatively expensive to learn, design, put into place, and integrate. Smart cards, geographic information systems, global positioning networks, highway telemetry, and satellite photography offer promising new ways unobtrusively to gather personal travel data while respecting the privacy of individuals and businesses. Once established, these technologies would be relatively inexpensive to maintain, upgrade, and operate.

With the active support of FTA and other agencies within and outside the Department, no organization is better positioned or better able to lead and coordinate such a transformation than BTS. But, again, experience teaches that an independent financial and technical contribution by FTA and each other mode is the most effective means to ensure the continued usefulness of NPTS.

PLANNING AND PROGRAM DEVELOPMENT ACTIVITIES

Question. The FTA has requested a total of $2,200,000 for planning and program development activities in fiscal year 2001. Please reproduce the funding breakout table on page 186 of the justification, noting the priority order of each of the five activities planned for fiscal year 2001.

Answer. The following table lists the planning and program development activities for fiscal year 2001:

[Dollars in thousands]

Program: FTA 7 planning and project development program	Program schedule			
	Fiscal year			Priority
	1999	2000	2001	
Key activities and products				
7. Planning and Project Development:				
7.1 Transportation Planning and Programming	.....	.....	$750	3
7.2. New Starts Planning and Project Development	$450	.....	550	2
7.3. Land Use and Environmental Planning	.....	.....	200	4
7.4. Planning Methods	.....	.....	500	5
7.5. Financial Planning	.....	.....	200	1
7.7. Citizens for Modern Transit	.....	$297	.....	.....
7.8. Wheeling, West Virginia Mobility Study	.....	247	.....	.....
7.9. Skagit County, WA, North Sound Connecting Communities Project	50	.....	.....	.....
7.10. Desert Air Quality Comprehensive Analysis, Las Vegas, NV	1,000	.....	.....	.....
7.11. Seattle, WA Livable City	200	.....	.....	.....
Total Budget Authority	1,700	544	2,200	.....

Question. Please update the Committee on the status of each of the three community planing and analysis projects included in the fiscal year 1999 appropriations bill: (1) Skagit County, Washington North Sound connecting communities; (2) Desert air quality comprehensive analysis, Las Vegas, Nevada; and (3) Seattle, Washington livable city. Have these grants been released? Are follow-on costs required or anticipated?

Answer. All three projects were released (awarded) in fiscal year 1999. No additional follow-on costs are required or anticipated. The project in Skagit County, Washington North Sound and connecting communities, is intended to study a cross-border seamless transportation system. A seamless system will improve the environment and air quality, reduce freight movement delays, and enhance domestic and international tourism through the Two-Nation vacation initiative.

The Desert air quality comprehensive analysis, Las Vegas, Nevada, is research on specific air pollution problems existing in the Las Vegas Metropolitan area. This will be a broad-scope study conducted by the Desert Research Institute, an affiliate of the University and Community College System of Nevada.

The Seattle, Washington Livable City project, will provide near-term Improvements in travel times and reliability to transit users thus encouraging higher ridership and reducing service costs. The City of Seattle and King County Metro will cooperate in implementing speed and reliability improvements.

PERFORMANCE AND REVIEW/EVALUATION

Question. The FTA has requested a total of $2,900,000 for performance and review/evaluation in fiscal year, of which $2,500,000 is for the congressionally mandated National Transit Database program. The fiscal year 2000 conference report directed FTA to work with the National Academy of Sciences to design a new transit data base, comprised of operational and performance measures and financial data necessary to fulfill FTA's statutory responsibilities in distributing formula grants, while providing meaningful data for state and local governments, transit industry personnel, and academic institutions. Consultation with the American Public Transportation Association in developing the new data base was encouraged. Please summarize the progress to date on developing this new data base model, which is to be submitted to the Appropriations Committees and the General Services Administration by May 31, 2000. Will the congressionally directed deadline be met? Will FTA be able to utilize the new design in the fiscal year 2001 cycle of federal grantee reports?

Answer. The FTA is on schedule to deliver a report to Congress on a new, revised National Transit Database (NTD) for the 21st Century by May 31, 2000. If funding is made available, the FTA is planning to restructure and test the new NTD in time to work on report year 2001 data.

FTA is making progress on developing a new, revised NTD. FTA conducted and completed three outreach-listening sessions with transit professionals across the nation. These sessions were held in Chicago, San Francisco, and Washington, DC. The Washington, DC session focused on transit safety data. In addition, FTA met individually with transit agencies and safety groups. A national FAX number and an Internet web site were established to receive comments for those unable to attend the outreach sessions.

FTA has worked closely with the Transportation Research Board of the National Academy of Sciences (TRB/NAS). The TRB has formed a committee to review our findings and recommendations. FTA met with the TRB committee on April 10. In addition, FTA met with the APTA committee, comprised of general managers and safety directors to review the NTD and proposed changes. A report on recommendations to revise the NTD (phase I of the project) is expected to be transmitted to Congress by the end of May 2000.

FTA will summarize and synthesize the comments and recommendations given to the FTA. All forms, procedures, and data elements will be evaluated. FTA's goal is to improve the usefulness of the NTD to transit without adding to the burden of reporting agencies. By the end of April, FTA will have received TRB and APTA comments and will prepare a draft report to Congress, completing Phase I of our action plan.

After submitting the report to Congress, and receiving comments on that report from Congress, GSA, TRB and others, FTA will incorporate these changes in the database forms, definitions, procedures, circulars, and database structure. At the end of fiscal year 2000, FTA plans to complete Phase II of the action plan, developing a prototype of the final revised NTD. Phase III is to program the revised NTD which will have a relational database. In fiscal year 2001, FTA has requested $1.5 million to program the new NTD and load the NTD data into a new relational database program. Completion of Phase III is expected to take much of fiscal year 2001. In fiscal year 2002, FTA will test an operational, new, revised NTD on report year 2001 data.

FTA'S URBAN MAGLEV AND ADVANCED TECHNOLOGY PILOT PROGRAM

Question. Federal Highway Administration funds are authorized within the highway trust fund firewall for two urban magnetic levitation technology programs to be administered by the Federal Transit Administration. The two statutory provisions providing the program's funding are Section 1218 of TEA–21, which authorizes a total of $5 million over the life of the authorization to research and develop low speed superconductive maglev technology; and Section 3015(c) of TEA–21, which authorizes $5 million per year for the 6 years to carry out a broad maglev technology development program. The FTA published a notice in the January 29, 1999 Federal Register soliciting applications for this program, stating that the agency, "anticipates multiple awards resulting from this solicitation." How many proposals were received by FTA before the March 1999 deadline? Of these applicants, how many projects have received awards? Please list the recipients and amounts.

Answer. Eight (8) proposals were received by the March 1999 deadline. To date, one project has received an award. Fiscal year 1998 and fiscal year 1999 funding from Section 3015(c) was allocated to this project, a total of $7,968,586. General Atomics Corporation (GA) will lead a team to develop maglev technology for the pur-

pose of providing a solution to urban and regional transportation problems. In addition to GA, the team is comprised of: Macklin Engineering, Hall Industries, Booz-Allen & Hamilton, Western Pennsylvania Maglev Development Corporation, Union Switch & Signal, Port Authority of Allegheny County, Sargent Electric Company, Mr. Richard Portis (DBE), P.J. Dick, Argonne National Laboratory, Carnegie Mellon University, Massachusetts Institute of Technology, and the Pennsylvania Department of Transportation.

Question. To date, have all the authorized fiscal year 1998, 1999, and 2000 funds been transferred from FHWA to FTA (both from the Section 3015(c) and 1218 programs)? Have all the available fiscal year 1998, 1999, and 2000 funds been awarded? If not, please elaborate on the reasons for the delay.

Answer. For the Section 3015(c) program, fiscal years 1998, 1999, and 2000 funds from 3015(c) have been transferred from FHWA to FTA. As stated above, fiscal year 1998 and 1999 funding has been awarded. Fiscal year 2000 funding was only recently transferred to FTA and has not yet been awarded. Fiscal year 2000 funding for the Advanced Technology Pilot Project will be used to fund cooperative agreements with one or more project groups to develop advanced magnetic levitation technology. The Federal Register Notice articulates the goals and objectives for the Advanced Technology Pilot Project and the Urban Maglev Program in general. FTA will again use this as a guide when considering awards during fiscal year 2000 to additional project groups. (Five other groups submitted "technically competitive" proposals in response to FTA's January 29, 1999 Federal Register Notice).

For the Section 1218 program, FTA recently received $1,742,000 from FHWA. FTA is currently working on an agreement with the Department of Energy to obligate $1,000,000 for SERAPHIM, a motor technology being developed by Sandia National Laboratory in New Mexico. For the additional funding ($742,000), FTA will again consider one or more of the groups that submitted proposals to FTA for Low Speed Maglev technology development.

Question. Please detail all Congressional input, both legislative and non-legislative, in the grant decision making process. Please include copies of all legislative direction or Congressional correspondence that influenced awards under this program.

Answer. Legislative guidance:

(1) The Transportation Equity Act for the 21st Century (TEA–21) has been the legislative guide to FTA for developing the Urban Maglev Program. In Section 3015(c), TEA–21 created a low speed magnetic levitation technology development project titled the Advanced Technology Pilot Project. This project authorizes the Department of Transportation to support further development of magnetic levitation technologies to demonstrate energy efficiency, congestion mitigation and safety benefits. The FTA Urban Magnetic Levitation Transit Technology Development Program (Urban Maglev Program) was then initiated through a January 29, 1999 Federal Register Notice to carry out this project as well as a similar low speed Maglev project created by TEA–21 and codified at 23 U.S.C. Section 322(i), entitled the Low Speed Project. The Low Speed Project is similar to the Section 3015(c) project except that funding is specifically for the development of superconductive technology. The Urban Maglev Program combines these two statutory provisions into a single program to include both superconductive and non-superconductive maglev technologies.

(2) fiscal year 2000 Conference Report that accompanied the appropriations bill for the Department of Transportation and Related Agencies for the fiscal year 2000 (Report 106–355) also provided guidance. This Report directed DOT to make available $1,000,000 from Section 322(h)(1)(B)(i) [the 1218 program] for the development of the Segmented Rail Phased Induction Electric Magnetic Motor (SERAPHIM).

Non-Legislative Guidance:

(1) Letter dated July 12, 1999 from the United States House of Representatives Committee on Transportation and Infrastructure communicating the Committee's intent for the 3015(c) program.

(2) Letter dated December 3, 1999, from the United States Senate Committee on Appropriations, which underscored the intent of the Committee to make available $1,000,000 from the 1218 program for SERAPHIM.

CONGRESS OF THE UNITED STATES,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
HOUSE OF REPRESENTATIVES,
Washington, DC, July 12, 1999.

Hon. GORDON J. LINTON,
Administrator, Federal Transit Administration,
Washington, DC.

DEAR ADMINISTRATOR LINTON: We are writing to clarify the intent of the advanced technology pilot project specified in Section 3015(c) of the Transportation Equity Act

for the 21st Century (Public Law 105–178). Section 3015(c) provides funding for low-speed magnetic levitation (MAGLEV) technology for public transportation purposes in urban areas to demonstrate energy efficiency, congestion mitigation, and safety benefits.

This provision was included in the House-passed version of TEA 21 in direct response to the Pittsburgh Airborne Shuttle System (PASS) low-speed MAGLEV project, which to our knowledge, was the only low-speed MAGLEV project seeking federal assistance at the time. In fact, House Committee Report 105–467 Part 1, accompanying the House-passed version of TEA 21, referred to the project, recognizing that $1 million was provided in the fiscal year 1998 DOT appropriations bill to support "low-speed magnetic levitation technology in Pittsburgh, Pennsylvania through the Allegheny County Port Authority" (page 204). In the conference committee on TEA 21, the Senate receded to the House on Section 3015(c), with the addition of new language clarifying the application of Davis Bacon labor provisions.

It was, and continues to be, our expectation that these funds will be made available to the Pittsburgh project. Congress clearly intended that the energy efficiency, congestion mitigation and safety benefits of the technology be demonstrated through the application of the technology. This cannot be achieved by spreading the funding over numerous projects. Concentrating the funding on one project, deploying one system and measuring its effects, is the only way to satisfy Congressional intent with respect to the advanced technology pilot project specified in Section 3015(c).

We look forward to working with you and the Department on this matter in the near future.

Sincerely,

BUD SHUSTER,
Chairman, Committee on Transportation and Infrastructure.

JAMES L. OBERSTAR,
Ranking Democrat, Committee on Transportation and Infrastructure.

THOMAS PETRI,
Chairman, Subcommittee on Ground Transportation.

NICK RAHALL, II,
Ranking Democrat, Subcommittee on Subcommittee on Ground Transportation.

U.S. SENATE,
COMMITTEE ON APPROPRIATIONS,
Washington, DC, December 3, 1999.

Hon. RODNEY E. SLATER,
Secretary, U.S. Department of Transportation,
Washington, DC.

DEAR MR. SECRETARY: We are writing to clarify a provision in the Conference Report accompanying the recently-enacted appropriations bill for the Department of Transportation and Related Agencies for the fiscal year ending September 30, 2000 (H.R. 2084, Report 106–355). In the fiscal year 2000 conference report, under the Magnetic Levitation Transportation Technology Deployment Program, the Conferees specified funding for the low-speed magnetic levitation program, which is authorized under Section 322, subsection (h)(1)(B)(i) of the Transportation Equity Act for the 21st Century (TEA–21). You will note that $1 million was designated in the report for the development of the Segmented Rail Phased Induction Electric Magnetic Motor (SERAPHIM). TEA–21 designated under the above-referenced subsection that a total of $5 million shall be available for ". . . the Secretary to make grants for the research and development of low-speed superconductivity magnetic levitation technology for public transportation purposes in urban areas . . ." Notwithstanding any other requirements of Section 322, subsection (h)(1)(B)(i), it was the intent of the Conferees that the SERAPHIM technology be an eligible project under this section. Additionally, it was the intent of the conferees that the authorized set-aside for the low-speed magnetic levitation program be fully funded over the life of the TEA–21 authorization. It is the understanding of the Appropriations Committees that this program has not yet received any funding, and therefore any available funds under the Magnetic Levitation Transportation Technology Deployment Program which are not otherwise Congressionally directed should be made available for the low-speed magnetic levitation program. We respectfully request that you proceed to allocate the funds already designated for SERAPHIM, and that you give full consideration to the Colorado Intermountain Fixed Guideway Authority's application for the Federal Transit Administration's low-speed magnetic levitation technology

program, as directed in the statement of managers language. If you have any questions, please do not hesitate to contact our Subcommittee staff.

Sincerely,

RICHARD C. SHELBY,
Chairman, Senate Subcommittee on Transportation, Appropriations.

FRANK R. WOLF,
Chairman, House Subcommittee on Transportation, Appropriations.

CAPITAL INVESTMENT GRANTS UNOBLIGATED FUNDS

Question. Please provide a list of any unobligated contract authority funds that have remained on the books for more than three years (that is, funds appropriated or authorized in or prior to fiscal year 1997).

Answer. Unobligated contract authority funds that have remained on the books for more than three years include $1.3 million in Section 5309, Fixed Guideway Modernization which will be redistributed by formula. Also, unobligated is $11.7 million in Section 5309, New Starts funds for projects that have been extended by legislative action. An example is the New Orleans Canal Street Corridor Project, the Virginia Railway Express, and the Hartford, CT—Griffin Line Project.

Question. Please provide a list of recoveries by program/project and amount made in fiscal year 1999 and estimated for fiscal year 2000. Please describe how funds can be "recovered", and the process for reallocating these funds.

Answer. A list of recoveries by program for fiscal year ending September 30, 1999 is provided below. We estimate a similar distribution of recoveries as they become available in fiscal year 2000.

Funds can be recovered when a project is closed or whenever there is a mutual agreement between the grantee and FTA that funds are no longer needed for a project. Recoveries for Section 5309 Bus and New Starts projects that were previously earmarked are reprogrammed after notification to and approval of the House and Senate Committees on Appropriations. Recoveries that are formularized and have not lapsed remain available to the urbanized area in which they were recovered. Recoveries that have become lapsed and were formularized remain with that section and are reapportioned to all areas according to legislative formula.

Department of Transportation, Federal Transit Administration, Recovery Activities

Program	*Fiscal year 1999*
Capital Investment Grants:	
Sec. 5309, Capital Program, Bus	$1,482,126
Sec. 5309, Capital Program, New Starts	18,905,850
Sec. 5309, Capital Program, Fixed Guideway Modernization	29,777
Sec. 5309, Capital Program, Rail Mod.	602,357
Sec. 5309, Capital Program, Oversight	3,693,679
Sec. 5309, Capital Program, Technology Introduction	296,091
Sec. 5303, Special Studies	43,458
Sec. 5313, State Planning and Research	967
Sec. 5314, National Planning and Research	15
Sec. 5307, Urbanized Area, 9(B)	534,633
Sec. 5310, Elderly and Persons with Disabilities	105,639
Sec. 5311, RTAP	404
Total, Capital Investment Grants	25,694,996

Question. Transit new starts and bus and bus facilities funds are subject to the "three-year rule", wherein earmarked appropriated funds not obligated after three fiscal years are available to be reprogrammed. Please provide two tables—a new starts table and a bus table—showing the updated obligation status of all projects whose funding has expired or will expire at the end of fiscal year 2000. Please note whether applications are in, what issues remain to be resolved, and whether it is the agency's opinion whether the project will be obligated before the end of the fiscal year.

Answer. The following tables lists the transit new starts and bus and bus facilities funds:

CAPITAL PROGRAM—BUS AND BUS RELATED—STATUS OF FISCAL YEAR 1998 UNOBLIGATED EARMARKS AS OF MARCH 31, 2000

REG.	AREA	PROJECT NO.	PROJECT DESCRIPTION	AVAILABLE FUNDING	OBLIGATION STATUS (DATE)	FEDERAL DOLLARS OBLIGATED	UNOBLIGATED
1	NEW HAVEN, CT IN FINAL PROCESSING; APPROVAL EXPECTED IN FISCAL YEAR 2000.	CT–03–0109–01	BUS GARAGE/MAINTENANCE FACILITY, FISCAL YEAR 1998 APPROP. EARMARK.	$1,172,636			$1,172,636
	VERMONT (STATEWIDE) (VAOT) APPLICATION EXPECTED IN FOURTH QUARTER; APPROVAL EXPECTED IN FISCAL YEAR 2000.	VT–03–0028	9 BUSES/FACILITY IMPROVEMENTS, FISCAL YEAR 1998 APPROP. EARMARK.	76,420			76,420
	BURLINGTON, VT APPLICANT REQUESTING CONGRESSIONAL APPROVAL TO EXTEND FISCAL YEAR1998 FUNDS.	VT–03–0031	MULTIMODAL CENTER, FISCAL YEAR 1998 APPROP. EARMARK	1,465,794			1,465,794
2	BUFFALO, NY (NFTA) APPLICATION IN; UNDER REVIEW; WILL BE APPROVED IN FISCAL YEARY 2000.	NY–03–0342	HUBLINK PROGRAM, FISCAL YEAR 1998 APPROP. EARMARK	977,196			977,196
	NEW ROCHELLE, NY ENVIRONMENTAL ISSUES; APPROVAL EXPECTED IN FISCAL YEAR 2000. FISCAL YEAR 1997 EARMARK EXTENDED.	NY–03–00XX	INTERMODAL FACILITY.				
			FISCAL YEAR 97 APPROP. EARMARK	1,235,000			1,235,000
			FISCAL YEAR 1998 APPROP. EARMARK	1,465,794			1,465,794
			TOTAL	2,700,794			2,700,794
	POUGHKEEPSIE, NY (MTA) IN FINAL PROCESSING.	NY–03–0362	INTERMODAL FACILITY, FISCAL YEAR 1998 APPROP. EARMARK	1,954,393			1,954,393
	STATEN ISLAND/BROOKLYN, NY DESIGN WORK FOR HOV LANES OBLIGATION EXPECTED IN FOURTH QUARTER.	NY–03–0XXX	MOBILITY PROJECT, FISCAL YEAR 1998 APPROP. EARMARK	977,196			977,196

CAPITAL PROGRAM—BUS AND BUS RELATED—STATUS OF FISCAL YEAR 1998 UNOBLIGATED EARMARKS AS OF MARCH 31, 2000—Continued

REG.	AREA	PROJECT NO.	PROJECT DESCRIPTION	AVAILABLE FUNDING	OBLIGATION STATUS (DATE)	FEDERAL DOLLARS OBLIGATED	UNOBLIGATED
	YONKERS, NY IN FINAL PROCESSING	NY–03–0361	INTERMODAL FACILITY/PARKING FACIL. AT LARKIN PLAZA, FISCAL YEAR 1998 APPROP. EARMARK.	1,954,393			1,954,393
3	FAYETTE & SOMERSET, PA APPLICATION EXPECTED IN FISCAL YEAR 2000; APPROVAL EXPECTED IN FISCAL YEAR 2000.	PA–03–0292	2 30FT EXPAN. BUSES/2 RADIOS FOR FAYETTE CTY; 2 30FT EXPAN. BUSES/1 VAN AND RADIO COMM. SYSTEM FOR SOMERSET CTY, FISCAL YEAR 1998 APPROP. EARMARK.	125,998			125,998
	TOWANDA BOROUGH, PA APPLICATION IN; ANTICIPATED FISCAL YEAR 2000 OBLIGATION. APPROVAL EXPECTED IN FISCAL YEAR 2000.	PA–03–0311	INTERMODAL BUS FACILITY, FISCAL YEAR 1998 APPROP. EARMARK.	1,954,393			1,954,393
	WILKES BARRE, PA PROJECT IN TIP/STIP; APPLICATION EXPECTED IN FISCAL YEAR 2000; MAY LAPSE.	PA–03–0XXX	INTERMODAL FACILITY, FISCAL YEAR 1998 APPROP. EARMARK	1,465,794			1,465,794
	PENNSYLVANIA (STATEWIDE) RED ROSE TRANSIT AUTHORITY (PART OF STATEWIDE); APPROVAL EXPECTED IN FISCAL YEAR 2000.	PA–03–0XXX	BUSES AND INTERMODAL FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	244,299			244,299
	HUNTINGTON, WV APPLICATION UNDER REVIEW. OBLIGATION EXPECTED IN FISCAL YEAR 2000.	WV–03–0026	INTERMODAL FACILITY AND BUSES, FISCAL YEAR 1998 APPROP. EARMARK.	6,440,374			6,440,374
	ALEXANDRIA, VA (WMATA) NO APPLICATION; APPROVAL EXPECTED IN FISCAL YEAR 2000.	VA–03–00XX	EXTEN. OF CANOPY TO PROVIDE WEATHER PROTECTION TO BUS PATRONS AT CLARENDON METRO STATION, FISCAL YEAR 1998 APPROP. EARMARK.	244,299			244,299
	DULLES, VA (WMATA) NO APPLICATION; APPROVAL EXPECTED IN FISCAL YEAR 2000.	VA–03–00XX	8–10 BUSES TO SUPPORT EXPRESS SERVICE, FISCAL YEAR 1998 APPROP. EARMARK.	2,442,991			2,442,991

	RICHMOND, VA APPLICATION UNDER REVIEW; ANTICIPATED FISCAL YEAR 2000 OBLIGATION.	VA–03–0059–01	MULTIMODAL CENTER, FISCAL YEAR 1998 APPROP. EARMARK	2,442,991			2,442,991
	NEW CASTLE, DE (DDOT) APPLICATION EXPECTED IN FISCAL YEAR 2000; APPROVAL EXPECTED IN FISCAL YEAR 2000.	DE–03–00XX	BUSES AND BUS FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	1,465,794			1,465,794
4	TAMPA, FL (HILLSBOROUGH COUNTY) NO APPLICATION; APPROVAL EXPECTED IN FISCAL YEAR 2000.	FL–03–0XXX	BUSES AND BUS FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	1,465,794			1,465,794
	N. CAROLINA (NCDOT) (STATEWIDE) STATE PROJECT FOR 8 AREAS; APPLICATION EXPECTED FY 2000; APPROVAL EXPECTED IN FY 2000.	NC–03–0036–01	BUSES AND BUS FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	3,340,000			3,340,000
	ATLANTA, GA (MARTA)ANTICIPATED FISCAL YEAR 2000 OBLIGATION.	GA–03–0048–04	BUSES, FISCAL YEAR 1998 APPROP. EARMARK	2,060,830			2,060,830
	SAVANNAH/CHATHAM, AREA TRANSIT, GA APPLICATION EXPECTED IN FOURTH QUARTER; APPROVAL EXPECTED IN FISCAL YEAR 2000.	GA–03–0058	BUS FACILITY, FISCAL YEAR 1998 APPROP. EARMARK	3,908,785			3,908,785
	COLUMBIA, SC ISSUES CENTER ON TAKEOVER OF TRANSIT SYSTEM; MAY LAPSE.	SC–03–00XX	BUSES & FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK	1,954,393			1,954,393
	FLORENCE, SC (PEE DEE RTA) APPLICATION ON HOLD PENDING OUTCOME OF OIG INVESTIGATION; LACK OF LOCAL SHARE; MAY LAPSE.	SC–03–0015–02	INTERMODAL FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	1,143,908			1,143,908
	JACKSON, MS NO APPLICATION; GRANTEE DEVELOPING PROJECT SCOPE; APPROVAL EXPECTED IN FISCAL YEAR 2000.	MS–03–00XX	MAINTENANCE & ADMINISTRATION FACILITY PROJECT, FISCAL YEAR 1998 APPROP. EARMARK.	1,954,393			1,954,393

CAPITAL PROGRAM—BUS AND BUS RELATED—STATUS OF FISCAL YEAR 1998 UNOBLIGATED EARMARKS AS OF MARCH 31, 2000—Continued

REG.	AREA	PROJECT NO.	PROJECT DESCRIPTION	AVAILABLE FUNDING	OBLIGATION STATUS (DATE)	FEDERAL DOLLARS OBLIGATED	UNOBLIGATED
	BIRMINGHAM/JEFFERSON CTY, AL NO APPLICATION; APPROVAL EXPECTED IN FISCAL YEAR 2000.	AL–03–00XX	BUSES, FISCAL YEAR 1998 APPROP. EARMARK	2,931,588			2,931,588
	BIRMINGHAM, AL NO APPLICATION; DEVELOPING COST ALLOCATION; APPROVAL EXPECTED IN FISCAL YEAR 2000.	AL–03–00XX	DOWNTOWN INTERMODAL TRANSP. FACIL., PHASE 2, FISCAL YEAR 1998 APPROP. EARMARK.	5,863,178			5,863,178
	MOBILE, AL APPLICATION IN; NEEDS CLARIFICATION ON TRANSIT ELEMENT; APPROVAL EXPECTED IN FISCAL YEAR 2000.	AL–03–0020	SOUTHERN MARKET HISTORIC INTERMODAL CENTER, FISCAL YEAR 1998 APPROP. EARMARK.	977,196			977,196
	MOBILE, AL APPLICATION IN; NEEDS CLARIFICATION ON TRANSIT ELEMENT;APPROVAL EXPECTED IN FISCAL YEAR 2000.	AL–03–0021	MUNICIPAL PIER INTERMODAL WATERFRONT ACCESS REHAB PROJECT, FISCAL YEAR 1998 APPROP. EARMARK.	977,196			977,196
	MOBILE, AL (CITY) OBLIGATION EXPECTED IN FISCAL YEAR 2000	AL–03–00XX	BUSES, FISCAL YEAR 1998 APPROP. EARMARK	200,448			200,448
	MOBILE, AL ANTICIPATED THIRD QUARTER FISCAL YEAR 2000 OBLIGATION.	AL–03–0022	INTERMODAL FACILITY, FISCAL YEAR 1998 APPROP. EARMARK	5,374,579			5,374,579
5	MINNESOTA (METRO COUNCIL TRANSIT OPERATORS). NO APPLICATION; APPROVAL EXPECTED IN FISCAL YEAR 2000.	MN–03–00XX	BUSES AND BUS FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	8,794,766			8,794,766
	ST. PAUL, MN IN FINAL PROCESSING; APPROVAL EXPECTED IN FISCAL YEAR 2000.	MN–03–0064	SNELLING BUS GARAGE, FISCAL YEAR 1998 APPROP. EARMARK.	1,465,794			1,465,794

	MILWAUKEE, WI NO APPLICATION; APPROVAL EXPECTED IN FISCAL YEAR 2000.	WI–03–00XX	RAIL STATION REHAB./INTERMODAL FACILITY REHAB, FISCAL YEAR 1998 APPROP. EARMARK.	977,196			977,196
6	EL PASO, TX (CITY) APPLICATION IN; APPROVAL EXPECTED IN FISCAL YEAR 2000.	TX–03–0206	EQUIP. FOR DEMAND RESPONSE FACIL., FISCAL YEAR 1998 APPROP. EARMARK.	977,196			977,196
	GALVESTON, TX APPLICATION EXPECTED MAY 1; APPROVAL EXPECTED IN FISCAL YEAR 2000.	TX–03–0XXX	AFI VEHICLES/BUSES AND FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	1,486,665			1,486,665
	BRAZOS, TX (BTA) COMBINED W/FISCAL YEAR 1997 EM (LIBERTY/MONTGOMERY/POLK COUNTIES); EXPECT APPLICATION IN THIRD QUARTER. APPROVAL EXPECTED IN FISCAL YEAR 2000.	TX–03–0205	BUSES AND BUS FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	409,748			409,748
	MONROE, LA APPLICATION EXPECTED FISCAL YEAR 2000; APPROVAL EXPECTED IN FISCAL YEAR 2000.	LA–03–0075–01	BUSES AND BUS–RELATED FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	781,757			781,757
	ST. TAMMANY PARISH, LA APPROVAL EXPECTED IN FISCAL YEAR 2000	LA–03–00XX	BUSES AND BUS-RELATED FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	293,159			293,159
	NEW MEXICO ST. HWY APPLICATION EXPECTED IN THIRD QUARTER; APPROVAL EXPECTED IN FISCAL YEAR 2000.	NM–03–0024–01	PARK AND RIDE PROJECT & TRANSP. DEPT., FISCAL YEAR 1998 APPROP. EARMARK.	1,615,117			1,615,117
	NEW MEXICO (STATEWIDE) APPLICATION EXPECTED IN FISCAL YEAR 2000; APPROVAL EXPECTED IN FISCAL YEAR 2000.	NM–03–00XX	BUSES AND BUS FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	1,069,745			1,069,745
8	SALT LAKE CITY, OGDEN, UT & WEST VALLEY, UT (UTA). APPLICATION INCOMPLETE; APPROVAL EXPECTED IN FISCAL YEAR 2000.	UT–03–0028–01	3 INTERMODAL TERMINALS, FISCAL YEAR 1998 APPROP. EARMARK.	1,539,057			1,539,057

CAPITAL PROGRAM—BUS AND BUS RELATED—STATUS OF FISCAL YEAR 1998 UNOBLIGATED EARMARKS AS OF MARCH 31, 2000—Continued

REG.	AREA	PROJECT NO.	PROJECT DESCRIPTION	AVAILABLE FUNDING	OBLIGATION STATUS (DATE)	FEDERAL DOLLARS OBLIGATED	UNOBLIGATED
	MURRAY CITY & SANDY, UT (UTA) ..... APPLICATION IN; APPROVAL EXPECTED IN FISCAL YEAR 2000.	UT–03–0033–01 ...	TWO PARK AND RIDE LOTS, FISCAL YEAR 1998 APPROP. EARMARK.	788,553	.....	.....	788,553
	COLORADO (STATEWIDE) ..... IN FINAL PROCESSING	CO–03–00XX	BUS AND BUS FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	60,043	.....	.....	60,043
9	TUCSON, AZ ..... NO APPLICATION; NEEDS EA; APPROVAL EXPECTED IN FISCAL YEAR 2000.	AZ–03–00XX	INTERMODAL CENTER, FISCAL YEAR 1998 APPROP. EARMARK ...	977,196	.....	.....	977,196
	SONOMA COUNTY, CA ..... NO APPLICATION; APPROVAL EXPECTED IN FISCAL YEAR 2000.	CA–03–0503	3 PARK AND RIDE LOTS, FISCAL YEAR 1998 APPROP. EARMARK.	977,196	.....	.....	977,196
	FOLSOM, CA ..... APPLICATION IN; INCOMPLETE; APPROVAL EXPECTED IN FISCAL YEAR 2000.	CA–03–0500	MULTIMODAL FACILITY, FISCAL YEAR 1998 APPROP. EARMARK ..	1,465,794	.....	.....	1,465,794
	INGLEWOOD, CA ..... NO APPLICATION; APPROVAL EXPECTED IN FISCAL YEAR 2000.	CA–03–0XXX	TRANSIT CENTER PROJECT, FISCAL YEAR 1998 APPROP. EARMARK.	488,598	.....	.....	488,598
	LAKE TAHOE, CA ..... APPLICATION EXPECTED FISCAL YEAR 2000; ANTICIPATED FISCAL YEAR 2000 OBLIGATION.	CA–03–0XXX	INTERMODAL TRANSIT CENTERS, FISCAL YEAR 1998 APPROP. EARMARK.	977,196	.....	.....	977,196
	RIVERSIDE COUNTY, CA (SCAG) ..... APPLICATION SUBMITTED; APPROVAL EXPECTED IN FISCAL YEAR 2000.	CA–03–00XX	BUSES AND FACILITIES & ITS APPLICATIONS, FISCAL YEAR 1998 APPROP. EARMARK.	977,196	.....	.....	977,196

	MODESTO, CA APPLICATION EXPECTED IN FOURTH QUARTER; APPROVAL EXPECTED IN FISCAL YEAR 2000.	CA–03–0XXX	BUS MAINTENANCE FACILITY, FISCAL YEAR 1998 APPROP. EARMARK.	1,710,093			1,710,093
	RIALTO, CA (OMNITRANS) APPLICATION EXPECTED IN THIRD QUARTER; APPROVAL EXPECTED IN FISCAL YEAR 2000.	CA–03–0XXX	METROLINK DEPOT, FISCAL YEAR 1998 APPROP. EARMARK	1,074,916			1,074,916
	SACRAMENTO, CA APPLICATION EXPECTED IN THIRD QUARTER; APPROVAL EXPECTED IN FISCAL YEAR 2000.	CA–03–0XXX	BUS FACILITY, FISCAL YEAR 1998 APPROP. EARMARK	977,196			977,196
	SAN JOAQUIN, CA (SMART) ENVIRONMENTAL ISSUES; MAY LAPSE	CA–03–0485	BUSES & BUS FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	1,954,393			1,954,393
	SANTA CLARA, CA OBLIGATION EXPECTED IN FISCAL YEAR 2000; APPROVAL EXPECTED IN FISCAL YEAR 2000.	CA–03–0512	BUSES & BUS FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK.	2,442,991			2,442,991
	DOWNEY, CA PORTION OF I–95 CONSORTIUM CITIES JOINT POWERS FISCAL YEAR 1998 EM; APPLICATION IN; ANTICIPATED FISCAL YEAR 2000 OBLIGATION.	CA–03–0517	FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK	1,942,991			1,942,991
	BUENA PARK, CA PORTION IF I–95 CONSORTIUM CITIES JOINT POWERS FISCAL YEAR 1998 EM; NO APPLICATION. APPROVAL EXPECTED IN FISCAL YEAR 2000.	CA–03–0XXX	FACILITIES, FISCAL YEAR 1998 APPROP. EARMARK	1,942,990			1,942,990
10	EVERETT, WA APPLICATION PENDING. OBLIGATION EXPECTED IN THIRD QUARTER. LAPSING FUND LETTER FORWARDED TO EVERETT JANUARY 2000. ENVIRONMENT DONE.	WA–03–0113	MULTIMODAL TRANSPORTATION CENTER, FISCAL YEAR 1998 APPROP. EARMARK.	2,442,991			2,442,991

CAPITAL PROGRAM—BUS AND BUS RELATED—STATUS OF FISCAL YEAR 1998 UNOBLIGATED EARMARKS AS OF MARCH 31, 2000—Continued

REG.	AREA	PROJECT NO.	PROJECT DESCRIPTION	AVAILABLE FUNDING	OBLIGATION STATUS (DATE)	FEDERAL DOLLARS OBLIGATED	UNOBLIGATED
	KING COUNTY/SEATTLE, WA (METRO KING) ..... 2 KING COUNTY FISCAL YEAR 1998 EM'S COMBINED; APPLICATION IN; OBLIGATION EXPECTED IN FOURTH QUARTER. LAPSE LETTER TO KING COUNTY JANUARY 2000. ENVIRONMENT DONE.	WA–03–0112–01 ...	MULTIMODAL FACILITY/METRO COMMUTER INTERMODAL CONNECTOR, FISCAL YEAR 1998 APPROP. EARMARK.	2,442,990	.....	.....	2,442,990
	KING COUNTY, WA ..... APPLICATION EXPECTED IN THIRD QUARTER; APPROVAL EXPECTED IN FISCAL YEAR 2000. LAPSE LETTER SENT TO KING COUNTY JANUARY 2000. PROJECT FOR ROW AND CONSTRUCTION COMPLETING ENV'T. EXPECT ENVIRONMENTAL DETERMINATION MAY 2000.	WA–03–0XXX	PARK & RIDE EXPANSION, FISCAL YEAR 1998 APPROP. EARMARK.	1,400,261	.....	.....	1,400,261
	CORVALLIS, OR ..... APPLICATION EXPECTED IN THIRD QUARTER; APPROVAL EXPECTED IN FISCAL YEAR 2000. LAPSING FUND LETTER MAILED JANUARY 2000.	OR–03–00XX	BUSES & BUS FACILITIES, AUTOMATED PASSENGER INFORMATION SYSTEM, FISCAL YEAR 1998 APPROP. EARMARK.	678,164	.....	.....	678,164

STATUS OF FISCAL YEAR 1998 UNOBLIGATED NEW START EARMARKS—NEW SYSTEMS

REG.	UZA	PROJECT NO.	PROJECT DESCRIPTION	CONGRESS EARMARK	STATUS	FEDERAL DOLLARS OBLIG.	UNOBLIG. EARMARK
1	BURLINGTON-ESSEX, VT ..... APPLICATION FOR ALTERNATIVE ANALYSIS IS EXPECTED IN THE THIRD QUARTER OF FISCAL YEAR 2000. GRANTEE WILL REQUEST CONGRESSIONAL APPROVAL TO EXTEND $4,342,828 BALANCE OF FISCAL YEAR 1998 FUNDS.	VT–03–0027	BURLINGTON ESSEX COMMUTER RAIL, FISCAL YEAR 1998 EARMARK.	$4,843,828	.....	.....	$4,843,828

2	NEW YORK APPLICATION EXPECTED IN FISCAL YEAR 2000, APPROVAL IN FISCAL YEAR 2000..	NY–03–00XX	ST. GEORGE FERRY TERMINAL PROJECT, FISCAL YEAR 1998 EARMARK.	2,491,914			2,491,914
	NASSAU COUNTY, NY IN FINAL PROCESSING. APPROVAL EXPECTED IN FISCAL YEAR 2000.	NY–03–0342	NASSAU HUB RAIL LINK EIS, FISCAL YEAR 1998 EARMARK	498,383			498,383
	NEW JERSEY (NJT) NO APPLICATION; GRANTEE WILL NOT APPLY FOR THESE FUNDS; LIGHT RAIL TO BE LOCALLY FUNDED. WILL NOT BE OBLIGATED IN FISCAL YEAR 2000.	NJ–03–00XX	BURLINGTON TO GLOUCESTER LINE, FISCAL YEAR 1995 EARMARK [1].	1,488,750			1,488,750
3	PITTSBURGH, PA (PAT) RECOVERY PLAN/ENVIRONMENTAL REVIEW COMPLETED. FUNDS MAY LAPSE SINCE PROJECT IS UNDER BUDGET AND FUNDS NOT NEEDED.	PA–03–0227–08	PITTSBURGH AIRPORT BUSWAY, FISCAL YEAR 1998 EARMARK	4,983,828			4,983,828
	VIRGINIA (PRTC) FD AND CONSTRUCTION OF SECOND BRIDGE OVER QUANTICO CREEK FOR VRE NEED ENVIRONMENTAL DOCUMENTATION.	VA–03–0066 VA–03–0066–01	VIRGINIA RAILWAY EXPRESS—WOODBRIDGE STATION IMPROVEMENTS, FISCAL YEAR 1997 EARMARK.	2,979,069	OBLIGATED	$700,000	2,279,069
	APPLICATION UNDER REVIEW. REHAB PARK AND RIDE LOT AT WOODBRIDGE AND ALEXANDRIA KING STREET. NEED ENVIRONMENTAL DOCUMENTATION. ANTICIPATE OBLIGATION IN 3RD OR 4TH QUARTER IN FISCAL YEAR 2000.	VA–03–0067	FISCAL YEAR 1998 EARMARK	1,993,530	7-20-99		1,993,530
4	MIAMI, FL (MDTA) DUE TO FAILED SALES TAX REFERENDUM PROJECT IS ON HOLD. FEIS NEEDS TO BE RE-EVALUATED. GRANTEE WANTS TO REPROGRAM FOR EXTENSION OF EXISTING BUSWAY (SOUTH DADE).	FL–03 – 0183	METRO DADE EAST–WEST CORRIDOR PROJECT PE/EIS, FISCAL YEAR 1998 EARMARK.	4,983,828	OBLIGATED 11-20-98		4,983,828
	MEMPHIS, TN (MATA) IN FINAL STAGES OF ENVIRONMENTAL REVIEW. EXPECT APPROVAL IN FISCAL YEAR 2000.	TN–03–0040	MEMPHIS MEDICAL CENTER RAIL PLAN EXTENSION PROJECT, FISCAL YEAR 1998 EARMARK.	2			2

STATUS OF FISCAL YEAR 1998 UNOBLIGATED NEW START EARMARKS—NEW SYSTEMS—Continued

REG.	UZA	PROJECT NO.	PROJECT DESCRIPTION	CONGRESS EARMARK	STATUS	FEDERAL DOLLARS OBLIG.	UNOBLIG. EARMARK
	NORTH CAROLINA (RALEIGH-DURHAM) ..... IN FINAL PROCESSING; APPROVAL EXPECTED IN FISCAL YEAR 2000.	NC–03–0037–01 ...	TRIANGLE TRANSIT PROJECT, FISCAL YEAR 1998 EARMARK	11,961,188	OBLIGATED	.....	11,961,188
	JACKSON, MS ..... NO APPLICATION; WARNED OF LAPSE IN SEPTEMBER 2000. WORKING WITH GRANTEE TO DEFINE PROJECT. FISCAL YEAR 2000 OBLIGATION NOT EXPECTED.	MS–03–0013	INTERMODAL CORRIDOR, FISCAL YEAR 1998 EARMARK	2,990,300	OBLIGATED	.....	2,990,300
5	CLEVELAND, OH ..... NO APPLICATION SUBMITTED. MIS UNDERWAY; EARLY IN PROJECT DEVELOPMENT STAGE POSSIBLE LAPSE.	OH–03–0185	BEREA RED LINE EXTENSION TO HOPKINS INT. AIRPORT, FISCAL YEAR 1998 EARMARK.	697,736	.....	.....	697,736
	MINNEAPOLIS, MN (TWIN CITIES) ..... PENDING APPROVAL OF FINAL DESIGN. APPROVAL EXPECTED IN FISCAL YEAR 2000.	MN–03–0058–01 ..	HIAWATHA CORRIDOR PROJECT, FISCAL YEAR 1998 EARMARK ...	6,589,188	OBLIGATED 7-2-99	6,467,000	122,188
6	HOUSTON, TX (METRO) ..... FFGA; IN FINAL PROCESSING; APPROVAL EXPECTED IN FISCAL YEAR 2000.	TX–03–0150–04	REGIONAL BUS PLAN, FISCAL YEAR 1998 EARMARK	50,934,727	OBLIGATED	.....	50,934,727
	AUSTIN, TX ..... APPLICATION IN; APPROVAL EXPECTED IN FISCAL YEAR 2000.	TX–03–0XXX	CAPITAL METRO PROJECT, FISCAL YEAR 1998 EARMARK	996,766	.....	.....	996,766
	DALLAS, TX (DART) ..... APPROVAL EXPECTED IN 3RD QUARTER OF FISCAL YEAR 2000.	TX–03–0153–02	DALLAS-FORT WORTH RAILTRAN PROJECT, FISCAL YEAR 1998 EARMARK.	7,974,126	OBLIGATED	.....	7,974,126

	GALVESTON, TX APPLICATION EXPECTED IN 3RD QUARTER FOR $1 MILLION OF EARMARK AND WILL REQUEST CONGRESS TO EXTEND PERIOD AVAILABILITY FOR REMAINDER.	TX–03–0XXX	RAIL TROLLEY (DIESEL) SYSTEM PROJECT, FISCAL YEAR 1998 EARMARK.	1,993,530			1,993,530
	NEW ORLEANS, LA (RTA) APPLICATION NOT SUMBITTED. ADDITIONAL ENVIRONMENTAL WORK POSSIBLE LAPSE.	LA–03–0072–02	NEW ORLEANS CANAL STREET, CORRIDOR PROJECT AA/EIS.				
			FISCAL YEAR 1997 EARMARK (extended)	7,944,183			7,944,183
			FISCAL YEAR 1998 EARMARK	5,980,594			5,980,594
			Total	13,924,777			13,924,777
	NEW ORLEANS, LA GRANT APPLICATION EXPECTED IN 3RD QUARTER OF FISCAL YEAR 2000. NEEDS TO ENTER PE. POSSIBLE LAPSE.	LA–03–0074–01	DESIRE STREETCAR PROJECT, FISCAL YEAR 1998 EARMARK	1,993,530			1,993,530
8	COLORADO (PITKIN COUNTY) NEEDS PE APPROVAL; TIGHT TIME SCHEDULE FOR FISCAL YEAR 2000 OBLIGATION. DIFFICULTIES IN COMPLETING AA/DEIS. MAY LAPSE.	CO–03–0082	ROARING FORK VALLEY RAIL, ASPEN TO GLENWOOD SPRINGS, FISCAL YEAR 1998 EARMARK.	1,993,530	OBLIGATED 6-18-99	1,200,000	793,530
	SALT LAKE CITY, UT (UTA) UTA SEEKING TO REVISE EARMARK LANGUAGE TO FUND GATEWAY INTERMODAL TERMINAL. MAY LAPSE.	UT–03–0034	REGIONAL COMMUTER RAIL, FISCAL YEAR 1998 EARMARK	3,987,062	OBLIGATED 8-5-99	1,200,000	2,787,062
9	SAN DIEGO, CA APPROVAL EXPECTED IN FISCAL YEAR 2000	CA–03–0531	MID–COAST CORRIDOR PROJECT, FISCAL YEAR 1998 EARMARK.	1,495,150	OBLIGATED		1,495,150
	SAN DIEGO, CA IN FINAL DESIGN; FFGA PENDING; 3RD QUARTER APPROVAL EXPECTED.	CA–03–0XXX	MISSION VALLEY EAST LRT CORRIDOR PROJECT, FISCAL YEAR 1998 EARMARK.	996,766			996,766
	SAN DIEGO, CA IN FINAL DESIGN; APPLICATION SUBMITTED; 3RD QUARTER APPROVAL EXPECTED.	CA–03–0XXX	OCEANSIDE–ESCONDIDO PASSENGER RAIL PROJECT, FISCAL YEAR 1998 EARMARK.	2,990,300			2,990,300

STATUS OF FISCAL YEAR 1998 UNOBLIGATED NEW START EARMARKS—NEW SYSTEMS—Continued

REG.	UZA	PROJECT NO.	PROJECT DESCRIPTION	CONGRESS EARMARK	STATUS	FEDERAL DOLLARS OBLIG.	UNOBLIG. EARMARK
	SAN BERNARDINO, CA ..... APPLICATION EXPECTED 4/2000. APPROVAL EXPECTED IN FISCAL YEAR 2000.	CA–03–0XXX	METROLINK EXTENSION PROJECT, FISCAL YEAR 1998 EARMARK.	996,766	.....	.....	996,766

[1] Extended by Congress.

STATE BY STATE BREAKOUT OF FEDERAL TRANSIT FUNDS

Question. For fiscal year 2001, please prepare a table that includes all firewall formula program funds, new starts funds as included in the administration's budget, and TEA–21 (Section 3031) earmarked bus funds, breaking out the funding distribution by state and category. Show a total at the bottom, and note what percentage of that total is represented by each state's subtotal.

Answer. For the Formula program and Capital Investments New Starts and Bus and Bus Facilities earmarks, the following table lists the fiscal year 2001 funding distribution by state and category:

FEDERAL TRANSIT ADMINISTRATION FISCAL YEAR 2001 GUARANTEED LEVEL APPORTIONMENTS/ALLOCATIONS BY STATE

State	Section 5307 urbanized area	Section 5311 non-urbanized area	Section 5310 elderly & persons with disabilities	Section 5309 new starts	Section 5309 fixed guideway modernization	Section 5309 bus allocation	Metropolitan planning section 5303	State planning section 5313	RTAP section 5311	State total selected FTA programs
Alabama	$13,046,848	$4,974,114	$1,363,957	.....	.....	.....	$456,460	$119,192	$110,266	$20,070,837
Alaska	[1] 7,433,414	741,748	197,821	[2] $5,161,000	.....	.....	208,454	54,432	71,750	13,868,619
American Samoa	.....	105,722	52,867	.....	.....	.....	.....	.....	10,962	169,551
Arizona	33,260,503	2,177,536	1,200,201	.....	$1,886,447	.....	830,166	172,054	84,816	39,611,723
Arkansas	5,119,390	3,976,597	946,967	5,672,000	.....	.....	208,454	54,432	101,188	16,079,028
California	482,887,208	9,705,577	7,477,863	251,248,165	105,855,347	$50,000,000	8,884,840	1,649,677	153,323	917,862,000
Colorado	37,142,854	2,071,753	926,429	40,203,485	1,399,669	.....	678,052	154,034	83,853	82,660,129
Connecticut	52,359,019	1,879,275	1,064,511	.....	38,394,771	.....	609,211	159,078	82,102	94,547,967
Delaware	6,122,420	468,834	308,825	.....	933,856	.....	208,454	54,432	69,266	8,166,087
District of Columbia	28,364,148	.....	306,385	.....	53,515,908	[3] 4,813,625	281,035	54,432	.....	87,335,533
Florida	146,712,613	6,239,173	5,039,527	38,800,000	17,274,352	.....	2,841,705	659,300	121,778	217,688,448
Georgia	51,231,289	7,272,683	1,774,590	25,000,000	21,678,953	.....	1,005,971	211,224	131,183	108,305,893
Guam	.....	300,966	134,536	.....	.....	.....	.....	.....	12,739	448,241
Hawaii	25,780,183	816,248	398,306	[2] 5,161,000	777,032	.....	208,454	54,432	72,428	33,268,083
Idaho	3,072,028	1,646,756	408,081	.....	.....	.....	208,454	54,432	79,986	5,469,737
Illinois	206,007,568	6,672,281	3,250,600	45,800,000	119,210,579	.....	3,045,133	549,244	125,719	384,661,124
Indiana	32,873,659	6,445,272	1,695,963	.....	8,801,272	.....	739,263	174,430	123,653	50,853,512
Iowa	9,360,438	4,145,662	1,019,530	.....	.....	.....	233,854	61,064	102,726	14,923,274
Kansas	7,996,681	3,297,743	851,478	.....	.....	.....	270,342	65,984	95,010	12,577,238
Kentucky	17,131,642	5,443,854	1,306,330	.....	.....	.....	323,818	82,714	114,540	24,402,898
Louisiana	27,667,179	4,502,461	1,310,621	.....	2,789,416	.....	559,575	144,329	105,973	37,079,554
Maine	2,203,751	2,172,613	515,251	.....	.....	.....	208,454	54,432	84,771	5,239,272
Maryland	77,392,198	2,712,403	1,316,914	30,000,000	25,244,770	.....	1,209,890	232,005	89,683	138,197,863
Massachusetts	115,219,238	2,906,872	1,905,644	35,969,249	66,655,030	.....	1,475,688	306,431	91,453	224,529,605
Michigan	62,637,557	7,872,306	2,778,229	.....	567,771	.....	1,901,088	376,528	136,640	76,270,119
Minnesota	29,392,604	4,530,057	1,335,764	20,000,000	3,264,028	.....	771,946	153,588	106,225	59,554,212

Mississippi	4,618,496	4,420,748	919,424	.....	.....	.....	208,454	54,432	105,230	10,326,784
Missouri	33,532,798	5,276,351	1,720,175	60,000,000	2,105,783	.....	853,487	180,264	113,016	103,781,874
Montana	2,324,606	1,334,002	372,751	.....	.....	.....	208,454	54,432	77,140	4,371,385
Nebraska	8,078,023	2,012,840	594,428	.....	.....	.....	208,454	54,432	83,317	11,031,494
Nevada	18,703,029	657,162	437,100	.....	.....	.....	226,025	59,020	70,980	20,153,316
New Hampshire	3,256,965	1,739,992	411,825	.....	.....	.....	208,454	54,432	80,834	5,752,502
New Jersey	176,774,768	2,487,820	2,291,863	131,000,000	89,510,699	.....	2,583,534	429,457	87,640	405,165,781
New Mexico	6,743,181	1,955,803	520,371	.....	.....	.....	208,454	54,432	82,798	9,565,039
New York	511,629,103	8,757,424	5,337,074	15,000,000	334,423,700	.....	5,246,297	914,428	144,694	881,452,720
North Carolina	26,423,807	9,302,971	2,020,953	.....	.....	.....	623,394	162,782	149,659	38,683,566
North Dakota	2,266,047	986,554	314,324	.....	.....	.....	208,454	54,432	73,978	3,903,789
Northern Marianas	.....	97,974	52,619	.....	.....	.....	.....	.....	10,892	161,485
Ohio	86,171,474	9,471,071	3,393,254	8,800,000	16,555,990	.....	1,795,921	431,234	151,189	126,770,133
Oklahoma	10,888,938	4,048,785	1,124,568	.....	.....	.....	335,987	87,733	101,845	16,587,856
Oregon	26,177,070	3,214,771	1,044,095	40,209,232	3,583,779	.....	377,404	91,990	94,255	74,792,596
Pennsylvania	141,740,405	10,565,079	4,072,337	20,000,000	100,145,538	[4] 2,977,500	2,329,261	466,897	161,145	282,458,162
Puerto Rico	42,415,576	3,157,178	989,437	118,000,000	2,503,755	.....	564,864	137,673	93,731	167,862,214
Rhode Island	10,057,038	404,440	456,412	.....	1,785,542	.....	208,454	54,432	68,680	13,034,998
South Carolina	10,959,566	4,656,183	1,086,351	.....	.....	.....	353,947	92,423	107,372	17,255,842
South Dakota	1,634,658	1,202,532	341,032	.....	.....	.....	208,454	54,432	75,943	3,517,051
Tennessee	21,984,782	6,010,601	1,614,124	22,974,990	88,672	.....	550,245	143,681	119,698	53,486,793
Texas	158,452,230	12,690,049	4,206,514	80,744,873	6,149,522	.....	3,541,065	736,686	180,482	266,701,421
Utah	19,572,743	911,586	483,564	15,718,006	.....	35,000,000	327,355	85,480	73,296	72,172,030
Vermont	821,531	1,075,168	278,448	.....	.....	.....	208,454	54,432	74,784	2,512,817
Virgin Islands	.....	230,121	137,109	.....	.....	.....	.....	.....	12,094	379,324
Virginia	58,221,090	5,328,980	1,679,979	.....	5,863,181	.....	1,164,748	248,088	113,495	72,619,561
Washington	82,706,220	3,733,949	1,504,629	35,000,000	18,695,054	.....	928,346	208,249	98,980	142,875,427
West Virginia	3,960,684	3,174,933	788,425	.....	.....	.....	208,454	54,432	93,893	8,280,821
Wisconsin	35,490,834	5,485,912	1,536,567	.....	801,584	.....	649,965	159,663	114,923	44,239,448
Wyoming	1,135,107	767,267	233,859	.....	.....	.....	208,454	54,432	71,982	2,471,101

FEDERAL TRANSIT ADMINISTRATION FISCAL YEAR 2001 GUARANTEED LEVEL APPORTIONMENTS/ALLOCATIONS BY STATE—Continued

State	Section 5307 urbanized area	Section 5311 non-urbanized area	Section 5310 elderly & persons with disabilities	Section 5309 new starts	Section 5309 fixed guideway modernization	Section 5309 bus allocation	Metropolitan planning section 5303	State planning section 5313	RTAP section 5311	State total selected FTA programs
Unallocated						[5] 382,814,875				382,814,875
Subtotal	2,987,155,201	208,236,752	78,850,801	1,050,462,000	1,050,462,000	475,606,000	52,113,600	10,886,400	5,250,000	5,919,022,754
Oversight	15,010,830	1,046,416		7,938,000	7,938,000	3,594,000				35,527,246
Total	3,002,166,031	209,283,168	78,850,801	1,058,400,000	1,058,400,000	479,200,000	52,113,600	10,886,400	5,250,000	5,954,550,000
Clean Fuels	50,000,000					50,000,000				100,000,000
Over-the-Road Bus Accessibility	4,700,000									4,700,000
Grand Total	3,056,866,031	209,283,168	78,850,801	1,058,400,000	1,058,400,000	529,200,000	52,113,600	10,886,400	5,250,000	6,059,250,000

[1] Includes $4,825,700 for the Alaska Railroad.
[2] Amount for Alaska/Hawaii Ferries distributed one-half to Alaska and one-half to Hawaii.
[3] Includes $4,850,000 for the Fuel Cell Bus activities (excluding Oversight the total is $4,813,625).
[4] Includes $3,000,000 for Bus Testing (excluding Oversight the total is $2,977,500).
[5] Includes $15,000,000 for transit service for the Mississippi Delta Region.

Question. For fiscal year 2000 enacted, please prepare a table that includes all firewall formula program funds, new starts funds as earmarked in the fiscal year 2000 Transportation Appropriations bill (before project management oversight is subtracted), and all earmarked bus funds (before project management oversight is subtracted), breaking out the funding distribution by state and category. Show a total at the bottom, and note what percentage of that total is represented by each state's subtotal.

Answer. For the Formula Grants and Capital Investments New Starts and Bus and Bus Facilities earmarks, the following table lists the fiscal year 2000 apportionments and allocations by state:

FEDERAL TRANSIT ADMINISTRATION FISCAL YEAR 2000 APPORTIONMENT FOR FORMULA PROGRAMS (BY STATE)

State	Sections 5303 & 5313(b) metropolitan and state planning	Section 5307 urbanized area	Section 5311 non-urbanized area	Section 5310 elderly and persons with disabilities	Section 5309 new starts	Section 5309 fixed guideway modernization	Section 5309 bus allocation	State total selected FTA programs	State percent of total
Alabama	$548,405	$12,150,687	$4,626,529	$1,263,045	$2,965,736	.....	$25,762,347	$47,316,749	0.8
Alaska	250,444	[1] 7,278,545	689,915	191,890	15,026,397	.....	15,495,348	38,932,539	0.7
American Samoa	.....	.....	98,334	52,634	.....	.....	.....	150,968	.....
Arizona	954,765	30,975,905	2,025,373	1,112,627	4,942,894	$1,537,626	6,920,044	48,469,234	0.9
Arkansas	250,444	4,767,749	3,698,718	880,019	.....	.....	5,101,063	14,697,993	0.3
California	10,035,627	449,718,653	9,027,365	6,878,982	192,772,850	96,152,878	37,744,718	802,331,073	14.3
Colorado	792,693	34,591,586	1,926,982	861,153	38,554,570	1,228,501	9,762,209	87,717,694	1.6
Connecticut	731,925	48,762,579	1,747,954	987,989	988,579	37,176,188	6,672,902	97,068,116	1.7
Delaware	250,444	5,701,883	436,072	293,852	988,579	761,099	2,471,444	10,903,373	0.2
District of Columbia	319,582	25,303,653	.....	291,611	.....	46,733,862	7,266,050	79,914,758	1.4
Florida	3,335,263	136,635,219	5,803,188	4,639,244	20,265,864	13,928,047	14,581,527	199,188,352	3.6
Georgia	1,159,565	47,712,313	6,764,478	1,640,232	45,615,004	17,654,104	21,501,572	142,047,268	2.5
Guam	.....	.....	279,935	133,760	.....	.....	.....	413,695	.....
Hawaii	250,444	24,009,395	759,209	376,045	5,140,609	630,723	4,201,456	35,367,881	0.6
Idaho	250,444	2,861,016	1,531,683	385,025	.....	.....	.....	5,028,168	0.1
Illinois	3,424,159	191,857,322	6,206,031	2,996,023	31,634,518	115,365,239	8,748,916	360,232,208	6.4
Indiana	870,439	30,615,633	5,994,885	1,568,010	4,942,894	7,719,142	9,144,347	60,855,350	1.1
Iowa	280,960	8,717,488	3,855,969	946,671	.....	.....	10,464,100	24,265,188	0.4
Kansas	320,405	7,447,404	3,067,301	792,307	988,579	.....	6,702,560	19,318,556	0.3
Kentucky	387,289	15,954,904	5,063,445	1,210,112	.....	.....	5,931,471	28,547,221	0.5
Louisiana	670,586	25,766,777	4,187,835	1,214,053	988,579	2,729,493	4,942,891	40,500,214	0.7
Maine	250,444	2,052,381	2,020,794	483,465	494,289	.....	.....	5,301,373	0.1
Maryland	1,373,617	70,753,720	2,522,864	1,219,834	11,569,350	22,803,052	11,368,647	121,611,084	2.2
Massachusetts	1,697,739	107,305,062	2,703,744	1,760,613	55,256,605	63,712,167	12,241,067	244,676,997	4.4
Michigan	2,169,767	58,335,107	7,322,200	2,562,126	.....	443,456	27,185,880	98,018,536	1.8
Minnesota	881,709	27,373,685	4,213,503	1,237,149	45,276,905	2,895,851	23,986,424	105,865,226	1.9
Mississippi	250,444	4,301,261	4,111,832	854,719	.....	.....	5,140,607	14,658,863	0.3
Missouri	984,805	31,229,498	4,907,646	1,590,250	51,900,383	1,897,058	14,532,097	107,041,737	1.9
Montana	250,444	2,164,933	1,240,784	352,572	.....	.....	593,147	4,601,880	0.1
Nebraska	250,444	7,523,160	1,872,185	556,193	.....	.....	996,241	11,198,223	0.2
Nevada	271,553	17,418,357	611,240	411,680	3,460,025	.....	5,387,751	27,560,606	0.5
New Hampshire	250,444	3,033,251	1,618,404	388,463	988,579	.....	2,965,735	9,244,876	0.2
New Jersey	2,870,292	165,948,966	2,313,974	2,115,374	113,192,257	86,282,903	10,775,501	383,499,267	6.8
New Mexico	250,444	6,280,007	1,819,134	488,168	9,885,787	.....	8,650,058	27,373,598	0.5

New York	5,868,960	476,486,339	8,145,467	4,912,556	6,425,761	319,167,476	26,884,383	847,890,942	15.1
North Carolina	748,964	24,608,809	8,652,892	1,866,530	11,862,945	.....	7,247,266	54,987,406	1.0
North Dakota	250,444	2,110,397	917,615	298,904	.....	.....	988,579	4,565,939	0.1
Northern Marianas	.....	.....	91,127	52,406	.....	.....	.....	143,533	.....
Ohio	2,121,724	80,252,528	8,809,245	3,127,059	5,437,184	15,660,310	13,603,082	129,011,132	2.3
Oklahoma	403,664	10,140,999	3,765,861	1,043,154	.....	.....	4,942,891	20,296,569	0.4
Oregon	447,175	24,379,019	2,990,127	969,236	11,429,952	2,889,741	8,353,486	51,458,736	0.9
Pennsylvania	2,663,758	130,688,045	9,826,805	3,750,831	23,231,600	97,354,625	28,562,002	296,077,666	5.3
Puerto Rico	669,281	39,502,140	2,936,559	919,030	31,634,519	1,983,748	593,147	78,238,424	1.4
Rhode Island	250,444	9,366,240	376,178	429,419	.....	1,457,827	3,256,377	15,136,485	0.3
South Carolina	425,242	10,206,774	4,330,816	1,008,050	2,471,447	.....	8,669,829	27,112,158	0.5
South Dakota	250,444	1,522,376	1,118,501	323,437	.....	.....	1,482,867	4,697,625	0.1
Tennessee	661,081	20,474,689	5,590,588	1,492,836	3,954,315	71,620	3,460,023	35,705,152	0.6
Texas	4,075,207	147,568,466	11,803,288	3,874,080	107,033,398	5,177,110	16,163,255	295,694,804	5.3
Utah	393,295	18,228,330	847,886	454,360	47,380,600	.....	14,136,666	81,441,137	1.5
Vermont	250,444	765,102	1,000,036	265,950	.....	.....	4,201,456	6,482,988	0.1
Virgin Islands	.....	.....	214,041	136,122	.....	.....	350,163	.....	.....
Virginia	1,345,942	56,656,783	4,956,598	1,553,327	27,877,920	994,643	10,562,959	103,948,172	1.9
Washington	1,082,785	77,025,296	3,473,026	1,392,260	31,634,519	15,347,558	19,573,845	149,529,289	2.7
West Virginia	250,444	3,688,632	2,953,073	734,389	.....	.....	21,254,427	28,880,965	0.5
Wisconsin	771,303	33,053,041	5,102,564	1,421,596	988,579	643,953	20,018,705	61,999,741	1.1
Wyoming	250,444	1,057,139	713,651	224,993	.....	.....	.....	2,246,227	.....
Total	60,017,074	[2] 2,782,329,243	[3] 193,685,449	[4] 72,986,415	[5] 969,202,571	980,400,000	[6] 541,193,365	5,599,814,117	100.0

[1] Includes $4,849,950 in funds appropriated for the Alaska Railroad improvements to passenger operations.
[2] Includes $4,589,012 in reapportioned recoveries.
[3] Includes $72,481 in reapportioned recoveries.
[4] Includes $39,614 in reapportioned recoveries.
[5] Includes a reduction of $11,197,429 as part of Public Law 106–113.
[6] Includes $1,199,750 of reallocated bus funds as part of Public Law 106–69; and a net reduction of $6,206,385 as part of Public Law 106–113.

ELIGIBILITY ISSUES

Question. Please provide a list of any of the fiscal year 2000 bus and bus facilities projects or new starts grantees who have encountered problems with having grants released because the project name listed in the appropriations legislation does not precisely match the description of the project forwarded by the grantee in their application.

Answer. The bus and bus facilities projects and new start grantees who have encountered problems because the project name listed in the appropriations legislation does not precisely match the description of the project forwarded by the grantee are listed below:

—Fiscal year 2000 New Starts Earmark: AK Girdwood, Alaska Commuter Rail Project ($9,810,787) Desired Change: AK Special Olympics, South Anchorage double track, North Anchorage Commuter rail service and track improvements

—Fiscal year 2000 Bus Earmark: AK Whittier Intermodal facility and pedestrian overpass ($1,133,165) Desired Change: AK Whittier Intermodal facility and pedestrian underpass

—Fiscal year 2000 Bus Earmark: AL Baldwin Rural Area Transportation System buses ($981,096) Desired Change: AL Baldwin Rural Area Transportation System vehicles, amenities and equipment

—Fiscal year 2000 Bus Earmark: Huntsville Space and Rocket Center intermodal center ($3,433,833) Desired Change: Huntsville Space and Rocket Center Intermodal Centers, vehicles and facilities

—Fiscal year 2000 Bus Earmark: MA Swampscott, buses ($63,772) Desired Change: MA Saugus, buses

—Fiscal year 2000 Bus Earmark: MI Michigan statewide buses ($22,074,625) Desired Change: MI Michigan statewide buses and bus facilities

BUS AND BUS-RELATED FACILITIES

Question. Are there any fiscal year 2001 bus and bus facilities earmarks in TEA–21? If so, please list the projects and locations, and the amount which is designated in TEA–21.

Answer. There are three fiscal year 2001 TEA–21 bus and bus facilities earmarks.

Project	Location	TEA–21 amount
Cleans Fuels Formula Program		$50,000,000
Fuel Cell Bus	Georgetown University	4,850,000
Bus Testing Facility	Altoona, Pennsylvania	3,000,000

Question. FTA has requested that $50,000,000 of the fiscal year 2001 bus and bus facilities funds be made available in Los Angeles to implement the Bus Consent Decree issued by the Special Master. How much in Section 5307 formula funds has the LACMTA received in fiscal years 1999 and 2000, and will be receiving in fiscal year 2001? Can't these funds be used to comply with the Bus Consent Decree?

Answer. In fiscal years 1999 and 2000, the LACMTA received $137 million and $91 million, respectively, in Section 5307 formula funds. It is projected that in fiscal year 2001, LACMTA will receive $96 million in Section 5307 funds.

The $50 million requested could help the LACMTA accelerate the purchase of 2,095 buses under its Accelerated Bus Procurement Program. The MTA has options on current procurements, which it could exercise immediately rather than wait a year or two when additional funds are projected to be available. Under its 5-year capital program, MTA (the programming agency for Los Angeles County) has chosen to apply fiscal year 2000 and 2001 Section 5307 funds to the capitalized preventive maintenance program and to capital improvements to bus facilities. New buses for these years will be purchased with other sources of federal funds, including CMAQ and STP. The MTA believes that this is the most efficient use of its federal funding.

Question. Please specify all eligible activities for the $35,000,000 in bus and bus facilities funds requested for the 2002 Winter Olympic and Paralympic Games.

Answer. Capital Investment Bus category funds can be used for any eligible purpose under U.S.C. Section 5309, including planning, bus lease or purchase, park-and-ride facilities, maintenance facilities and preventive maintenance expenses. Operational costs would not be eligible. The Salt Lake Organizing Committee (SLOC) recently submitted preliminary information outlining funding needs in fiscal year 2001 for the 2002 Winter Olympic Games. Funding is proposed as follows:

[In millions of dollars]

Planning	2
Venue Loading and Unloading	5
Transit Bus	8
Bus Maintenance Facilities	2
Park-and-Ride	18
Total	35

Question. Please provide a complete summary of all federal transit funding provided in support of the 1996 Olympics in Atlanta, Georgia.

Answer. The following table provides a summary of FTA funding for the 1996 Olympics in Atlanta Georgia:

SUMMARY OF FTA FUNDS: 1996 OLYMPIC AND PARALYMPIC GAMES

Project Number	Grantee	Obligation Date	Description	Local share	Percent	Federal share	Percent
			FTA FUNDED PROJECTS SPECIFICALLY FOR THE 1996 ATLANTA OLYMPIC GAMES				
GA–90–X094	MARTA	7/25/95	Operating Assistance: delivery, preparation, maintenance, fuel, tire lease, insurance, clean up, and return of 1600 buses.			$10,400,000	100
			FTA FUNDED PROJECTS SPECIFICALLY FOR THE 1996 ATLANTA PARALYMPIC GAMES				
GA–90–X094	MARTA	7/25/95	Operating Assistance: Paralympic transit expenses			4,350,000	100
			Planning Assistance: Prepare Paralympic's operations plan			250,000	100
GA–90–X090	ARC	3/14/95	Planning Assistance: Paralympics transportation planning			1,000,000	100
Total						5,600,000	100
			FTA FUNDED PROJECTS ACCELERATED IN SUPPORT OF THE 1996 ATLANTA OLYMPIC GAMES				
GA–03–0036	MARTA	9/30/91	Capital Assistance: North Line Rail Ext./ Medical Center to Dunwoody.	23,125,000	20	92,500,000	80
GA–03–0050	MARTA	12/08/94	Capital Assistance: AUC/MARTA Pedestrian Walkways	750,000	20	3,000,000	80
GA–03–0053	MARTA	7/25/95	Capital Assistance: MARTA ITS Project	3,325,000	20	13,300,000	80
Total				27,200,000	20	108,800,000	80

Question. What states have traditionally submitted a consolidated statewide bus and bus facilities grant request to FTA?

Answer. Alabama, Illinois, Iowa,, Louisiana, Maine, Maryland, Michigan, Missouri, New Hampshire, North Carolina, Ohio, Oklahoma, Rhode Island, Texas, Vermont, West Virginia, and Wisconsin have traditionally submitted a consolidated statewide bus and bus facilities request to FTA.

NEW STARTS

Question. Please provide a table broken out alphabetically by state that shows all new start projects that received appropriated federal funds in fiscal year 2000, with a federal funding history for each project back to the first year of federal funding, and total for each project.

Answer. The table below contains the information requested for all New Starts projects that received appropriated federal funds in fiscal year 2000.

FEDERAL TRANSIT ADMINISTRATION—CAPITAL NEW STARTS—DISPOSITION OF EARMARKS

State	Project location and description	Annual Earmarks											Total earmarks
		Fiscal year											
		1991 & prior	1992	1993	1994	1993 [1]	1995	1996	1997	1998	1999	2000	
AK/HI	Alask or Hawaii Ferry Projects										$10.32	$10.20	$20.52
AK	Girwood, Alaska Commuter Rail Project (under study)											9.81	9.81
AL	Birmingham—Transit Center											2.94	2.94
AZ	Phoenix—Metropolitan Area Transit									$3.99	$4.96	4.91	13.86
CA	Sacramento—South LRT Extension			$0.99	$0.99			$1.98	$5.96	20.23	23.31	24.53	77.99
CA	San Franciso BART to the Airport (Under Construction]		$22.50	18.25	14.75			1.11	27.31	29.80	39.70	63.77	217.19
CA	San Jose (San Jose LRT)—(Under Construction)		34.77	25.97	13.24		$20.00	8.77		21.33	26.80	19.62	170.50
CA	San Diego—Mission Valley-East LRT									1.00	1.49	19.62	22.11
CA	San Diego—Mid-Coast (2 (3)	$0.40	1.05						1.49	1.50	1.99	4.91	11.33
CA	San Diego—Oceanside-Escondido LRT Project									2.99	2.98	1.96	7.93
CA	Los Angeles—North Hollywood Extension Project											49.05	49.05
CA	Los Angeles—East Side & Mid-City projects										7.94	3.92	11.86
CA	Los Angeles-San Diego CR (LOSSAN)		10.00					8.40	1.49			0.98	20.87
CA	Orange County—Transitway Project											0.98	0.98
CA	Stockton-Altamont Commuter Rail Project											0.98	0.98
CA	San Bernardino Metrolink Project									1.00	0.99	0.98	2.97
CO	Denver—Southwest LRT Extension								2.83	22.93	39.70	34.34	99.80
CO	Denver—Southeast Multimodal Corridor										0.50	2.94	3.44
CO	Roaring Fork Valley Rail									1.99		0.98	2.97
CT	Stamford, CT—Fixed Guideway Connector										0.99	0.98	1.97
DE	Wilmington—Downtown Transit Connector											0.98	0.98
FL	Ft. Lauderdale-Tri-County Commuter Rail			4.64	9.93		9.93	9.88	8.94	7.97	3.97	9.81	65.07
FL	Palm Beach, Broward and Miami-Dade Counties Rail Corridor											0.49	0.49
FL	Miami—East/West Corridor Project								1.49	4.98	2.98	1.47	10.92
FL	Tampa Bay Regional Rail						0.49	0.49	1.99	1.00	0.99	0.98	5.94
FL	Pinellas County-Mobility Inititive Project											2.45	2.45
FL	Orlando—I–4 LRT Project								1.99	31.70	17.37	4.91	55.97
GA	Atlanta—DeKalb County Light Rail Project								0.66	1.00	0.99	0.98	3.63
GA	Atlanta—Dunwoody—North Springs	10.00		29.46				60.27	63.96	44.46	51.72	44.29	304.16
IL	Chicago—Metra Com. Rail Exts. & Upgrades Projs										5.96	24.53	30.49
IL	Chicago—Ravenswood & Douglas Br. Lines Projs										2.98		2.98
IL	Chicago—Ravenswood											3.43	3.43

IL	Chicago—Douglas Branch Line											3.43	3.43
IN	Indianapolis—Northeast Corridor Project									1.25		0.98	2.23
IN	Northern Indiana Commuter Rail								0.50	3.99	2.98	3.92	11.38
KS/MO	KC Area—Johnson Cnty, KS-I–35 Commuter Rail										0.99	0.98	1.97
LA	New Orleans—Canal Street LRT				3.57		9.93	4.94	7.94	5.98	21.84	0.98	55.18
ME	Branch Rail Line Regional Transit Program Calais (plan & env.)											0.49	0.49
MA	Boston—S. Boston Piers Transitway—Phase 1 (MOS–2)		10.75	37.96	9.93	$10.00	23.82	19.95	29.79	46.10	53.58	52.88	294.76
MA	Boston Metropolitan Urban Ring						1.09			1.00	0.74	0.98	3.81
MA	Boston—North Shore Corridor Project										0.99	0.98	1.97
MA/NH	Lowell, Ma-Nashua, NH Commuter Rail Project											0.98	0.98
MD	MARC System-wide Improvements			9.93	23.32		13.90	9.88	32.96	30.90	16.91	0.69	138.49
MD	MARC—Expansion Projects—Silver Spring Intermodal and Penn-Camden Rail Connection.											1.47	1.47
MD	Baltimore—Double Tracking Project										0.99	4.66	5.65
MD	Washington, DC/MD—Largo Extension										0.99	4.66	5.65
MN	Twin Cities—Transitways [other] Projects									1.50		2.94	4.44
MN	Twin Cities—Transitway [Hiawatha] Project									10.46	16.87	41.99	69.32
MO/IL	St. Louis—St. Clair LRT Extension (1)	4.45	2.05	1.99			5.95	1.98	31.77	29.90	34.74	49.05	161.88
MO	St. Louis—Metrolink	275.71	17.92	41.29	7.05		6.05	10.37	13.40			2.45	374.24
NC	Charlotte—South Corridor Transitway Project									1.00	2.98	3.92	7.90
NC	North Carolina—Research Triangle Transit Plan								1.99	11.96	9.93	7.85	31.73
NJ	New Jersey Urban Core—Newark—Rail Link										5.96	11.77	17.73
NJ	New Jersey Urban Core—Hudson-Bergen LRT			21.86	16.74		50.49		9.93	59.81	69.48	97.13	325.43
NJ/NY	Trans-Hudson Midtown Corridor											4.91	4.91
NJ	New Jersey—West Trenton—Commuter Rail								0.50		0.99	0.98	2.47
NM	Albuquerque—Light Rail Project										4.96	6.87	11.83
NM	Santa Fe/El Dorado Rail Link											2.94	2.94
NV	Las Vegas Clark Cnty—Fixed Guideway Project									4.98	3.97	3.43	12.38
NY	New York—Whitehall Ferry Terminal						2.48	2.47	3.72	2.49		1.96	13.12
NY	New York—East Side Access (LIRR to GCT)									19.94	23.82	1.96	45.72
OH	Dayton—Light Rail Study										0.99	0.98	1.97
OH	Cincinnati—Northeast Corridor				1.34		1.19	0.99	2.98	0.50	1.79	0.98	9.76
OH	Cleveland—Euclid Ave Corridor/Berea Ext. (2 (3)	4.73	1.00		0.79						1.99	0.98	9.49
OH	Ohio—Canton-Akron-Cleveland Commuter Rail				0.99			4.20	3.48	1.99	2.18	2.45	15.30
OR	Portland—Westside/Hillsboro Extension	1.00	13.31	67.49	82.87	10.38	89.62	128.58	137.04	63.20	25.53	10.85	629.84
OR	Portland-Wilsonville to Washington County, OR Connec. To Westside											0.49	0.49
PA	Harrisburg—Corridor One Project										0.99	0.49	1.48
PA	Pittsburgh—Stage II LRT Reconstruction										3.97	7.84	11.81
PA	Pittsburgh—North Shore CBD Transit Options MIS										0.99	9.81	10.80
PA	Philadelphia—Cross County Metro Study		0.51	0.70							0.99	0.98	3.18

FEDERAL TRANSIT ADMINISTRATION—CAPITAL NEW STARTS—DISPOSITION OF EARMARKS—Continued

State	Project location and description	Annual Earmarks											Total earmarks
		Fiscal year											
		1991 & prior	1992	1993	1994	1993 [1]	1995	1996	1997	1998	1999	2000	
PA	Philadelphia—Schuylkill Valley Metro Project										2.98	3.92	6.90
PR	San Juan-Tren Urbano Phase I						4.96	7.41	6.06	14.95	19.85	31.39	84.62
SC	Charleston—Monobeam Rail Project									1.50	2.18	2.45	6.13
TN	Memphis—Regional Rail				0.50			1.23	3.02	1.00	2.18	2.45	10.38
TN	Knoxville-Memphis Commuter Rail Feasibility Study											0.49	0.49
TN	Nashville—Regional Commuter Rail Project										0.99	0.98	1.97
TX	Austin—Capital Metro									1.00	0.99	0.98	2.97
TX	Dallas—North Central						2.48	2.96	10.92	10.96	15.88	49.05	92.25
TX	Galveston—Rail Trolley System Extension									1.99		1.47	3.46
TX	Houston—Regional Bus	146.07	15.36	33.75	38.71	1.00	29.77	22.36	40.31	50.94	59.23	51.77	489.27
TX	Houston—Advanced Regional Transit Project									1.00	1.99	2.94	5.92
UT	Salt Lake City—South LRT	15.52	2.56	2.98	2.98		4.96	9.64	34.75	63.20	69.48	37.21	243.28
UT	Salt Lake City—Olympic Transport. Infrastructure Investments											9.81	9.81
VA	Norfolk—Tidewater Rail Project									1.99	7.94	0.98	10.91
VA	Washington, DC/VA—Dulles Corridor Project										16.87	24.53	41.40
VA	Virginia Railway Express- Commuter Rail Project								2.98	1.99	1.99	2.16	9.12
WA	Seattle—Link LRT Project								2.98	8.97	4.96	24.53	41.44
WA	Seattle—Sounder Commuter Rail Project									8.97	40.69	4.91	54.57
WA	Spokane, WA—Light Rail Project										0.99	1.96	2.95
WI	Wisconsin—Ken.-Rac.-Milw. Commuter Rail										0.50	0.98	1.48
	Totals	457.88	131.78	297.26	227.70	21.38	277.11	317.86	495.13	663.24	811.46	961.76	4,662.54

[1] This column reflects the FY 93 Reallocated Earmarks.

Question. Please provide a table detailing by existing FFGA the amount of the FFGA, the actual amounts received through fiscal year 2000, the schedule 6 amounts through fiscal year 2000, any shortfalls or overages to date, the fiscal year 2000 enacted level, the fiscal year 2001 schedule 6 amount, the amount of shortfall included in the fiscal year 2001 budget, and total fiscal year 2001 budget request.

Answer. The following table lists the existing FFGA's and any shortfalls or overages:

FEDERAL TRANSIT ADMINISTRATION, EXISTING FFGAs SECTION 5309 NEW STARTS

Geographic location	Section 5309 FFGA amount	Total appropriated fiscal year 2000 & prior	Total attachment 6 fiscal year 2000 & prior	Cummulative shortfall fiscal year 2000 & prior	Fiscal year					Shortfall included in fiscal year 2001 budget request
					2000 enacted level	2000 attachment 6	2000 shortfalls/ overages	2001 proposed budget	2001 attachment 6	
Existing FFGAs:										
CA—Los Angeles-North Hollywood (FFGA)	$681,037,000	$581,819,469	$621,747,443	($39,927,974)	$49,053,936	$50,000,000	($946,064)	$50,000,000	$50,000,000	.....
CA—Sacramento—LRT Extension	111,200,000	76,000,550	77,297,998	(1,297,448)	24,526,968	25,000,000	(473,032)	35,199,450	33,902,002	($1,297,448)
CA—BART Extension to the SFO Airport	750,000,000	217,198,700	298,317,849	(81,119,149)	63,770,116	84,000,000	(20,229,884)	80,000,000	80,000,000	.....
CA—San Jose Tasman West LRT Project	182,750,000	170,501,285	182,750,000	(12,248,715)	19,621,574	20,000,000	(378,426)	12,248,715	.....	(12,248,715)
CO—Denver SW Corridor LRT	120,000,000	99,796,515	108,000,000	(8,203,485)	34,337,755	35,000,000	(662,245)	20,203,485	12,000,000	(8,203,485)
GA—Atlanta-North Springs	305,010,000	304,820,496	305,010,400	(189,904)	44,287,860	52,103,000	(7,815,140)	25,000,000	25,000,000	.....
MA—Boston-S. Boston Piers Trainsitway	330,726,320	294,757,071	330,726,320	(35,969,249)	52,875,235	53,961,528	(1,086,293)	35,969,249	.....	(35,969,249)
MD—MARC—Commuter Rail Improvements	105,251,373	105,237,766	105,251,373	.....	689,701	.....	.....	.....	.....	.....
MO—St. Louis—MetroLink St. Clair Extension	243,930,961	153,403,949	159,707,693	(6,303,744)	49,053,936	50,000,000	(946,064)	60,000,000	60,000,000	.....
NJ—Hudson—Bergen (MOS–1)	604,088,750	325,430,406	332,018,979	(6,588,573)	97,126,786	99,000,000	(1,873,214)	121,000,000	121,000,000	.....
OR—Portland—Westside/Hillsboro	630,060,336	629,851,104	630,060,336	(209,232)	10,852,698	.....	.....	209,232	.....	(209,232)
PR—San Juan—Tren Urbano	307,409,845	79,665,280	189,409,854	(109,744,574)	31,394,519	82,000,000	(50,605,481)	118,000,000	118,000,000	.....
TX—Houston—Regional Bus Plan	500,000,000	489,255,128	499,988,475	(10,733,347)	51,771,504	52,770,000	(998,496)	10,744,873	11,525	10,733,348
TX—Dallas—North Central LRT Extension	333,000,000	92,267,653	92,838,717	(571,064)	49,053,936	49,625,000	(571,064)	70,000,000	70,000,000	.....
UT—Salt Lake City—South LRT	237,393,530	236,675,524	237,393,530	(718,006)	37,210,353	60,000,000	(22,789,647)	718,006	.....	(718,006)
Total—existing FFGAs	5,441,858,115	3,274,861,427	3,173,155,677	(313,824,464)	615,626,877	713,459,528	(109,375,050)	639,293,010	569,913,527	(69,379,483)

Question. Please prepare a table that provides by project the capital cost, federal share (dollars and percentage), and local share (dollars and percentage) for each FFGA, those projects proposed for FFGAs in the budget request, and the fifty remaining projects that are furthest along in the planning and preliminary engineering process. Use estimates where necessary.

Answer. The table below contains the information requested on New Starts projects. It is based on the project sponsors requests for FTA funds made during the submission of Section 5309 New Starts criteria for the fiscal year 2001 Annual Report on New Starts as of November 1999. Thus, the federal and local share of project costs may be revised subject to negotiations of proposed Full Funding Grant Agreements. The table provides information regarding 33 additional projects rather than the 50 since the information requested is only available for projects approved for final design or preliminary engineering.

FTA FFGA STATUS

City/Project	Overall project rating	Total Project Cost	Section 5309 new starts share requested	New starts share percent of total project cost	Other federal funds proposed	Federal funds percent of the total project cost	Non-federal share of project cost	Non-federal percent of total project cost
Existing full funding grant agreements:								
Atlanta—North Springs	FFGA	$463.18	$370.54	80		80	$92.64	20
Boston—South Boston Piers Transitway Phase 1	FFGA	413.40	330.73	80		80	82.67	20
Dallas—North Central LRT Extension	FFGA	517.20	333.00	64		64	184.20	36
Denver—Southwest Corridor LRT	FFGA	176.32	120.00	68	$18.88	79	37.44	21
Houston—Regional Bus Plan	FFGA	625.00	500.00	80		80	125.00	20
Los Angeles—North Hollywood	FFGA	2,781.09	1,416.49	51	377.15	64	987.45	36
Maryland—MARC Extension to Frederick	FFGA	131.56	105.25	80		80	26.31	20
Northern New Jersey—Hudson-Bergen LRT MOS–1	FFGA	992.14	604.09	61	281.65	89	106.40	11
Portland—Westside/Hillsboro LRT	FFGA	963.72	630.07	65	74.00	73	259.65	27
Sacramento—South LRT Extension	FFGA	222.00	113.19	51		51	108.81	49
Salt Lake City—North-South LRT	FFGA	312.49	243.99	78	4.00	79	64.50	21
San Francisco—BART Extension to SFO Airport	FFGA	1,510.20	750.00	50		50	760.20	50
San Jose—Tasman West LRT	FFGA	325.00	182.75	56	57.94	74	84.31	26
San Juan—Tren Urbano	FFGA	1,653.00	307.40	19	400.90	43	944.70	57
St. Louis—Metrolink St. Clair Extension	FFGA	339.20	252.41	74		74	86.79	26
Subtotal		11,425.50	6,259.93	55	1,214.52	65	3,951.05	35
Pending full funding grant agreements:								
Fort Lauderdale—Tri-Rail Commuter Rail Upgrade.	Recommended	327.00	110.50	34	91.41	62	125.09	38
Newark Rail Link (MOS–1	Highly Recommended	207.70	142.00	68	25.30	81	40.40	19
San Diego—Mission Valley East LRT Extension	Highly Recommended	431.00	330.00	77	13.70	80	87.30	20
Subtotal		965.70	582.50	60	130.41	74	252.79	26

Proposed full funding grant agreements:								
Baltimore—Central LRT Double-Tracking	Recommended	153.70	120.00	78	2.95	80	30.75	20
Chicago—Douglas Branch Reconstruction	Highly Recommended	450.80	320.10	71	0.03	71	130.67	29
Chicago—Metra South West Corridor Commuter Rail.	Highly Recommended	165.50	103.90	63		63	61.60	37
Denver—Southeast Corridor LRT	Recommended	882.50	525.00	59		59	357.50	41
Memphis—Medical Center Extension	Recommended	69.10	55.30	80		80	13.80	20
Minneapolis—Hiawatha Corridor LRT	Recommended	548.60	274.30	50		50	274.30	50
Northern New Jersey—Hudson-Bergen MOS–2	Recommended	1,112.80	721.60	65	273.85	89	117.35	11
Pittsburgh—Stage II LRT Reconstruction	Recommended	383.70	100.20	26	10.23	29	273.27	71
Portland—Interstate MAX LRT Extension	Highly Recommended	350.00	257.50	74	24.00	80	68.50	20
Salt Lake City—CBD to University LRT	Recommended	105.80	84.60	80		80	21.20	20
Seattle—Central Link LRT (MOS)	Highly Recommended	1,500.00	500.00	33		33	1,000.00	67
Washington DC/MD—Largo Extension	Recommended	433.90	260.30	60	3.20	61	170.40	39
Subtotal	6,156.40	3,322.80	54	314.26	59	2,519.34	41	
Final Design:								
Dallas-Ft. Worth (Trinity Railway Express- Phase II).	Recommended	160.60	62.40	39	52.40	71	45.80	29
Little Rock (River Rail Project) [1]	Not Rated	13.2	8.6	65	2.00	80	2.60	20
Los Angeles-San Diego (LOSSAN Rail Corridor Imp. Project) [1].	Not Rated	35.7	24.1	68		68	11.57	32
New Orleans (Canal Streetcar Spine)	Not Recommended	139.40	111.50	80		80	27.88	20
Subtotal	348.90	$206.70	59	54.40	75	87.85	25	
Preliminary Engineering:								
Austin (Austin Area LRT System)	Recommended	739.00	369.50	50		50	369.50	50
Boston (South Boston Piers Transitway Phase II)	Not Recommended	363.70	291.00	80		80	72.70	20
Chicago (CTA Ravenswood Line Expansion)	Highly Recommended	327.1	245.5	75	14.00	79	67.56	21
Chicago (Metra Central Kane Corridor)	Recommended	93.00	54.3	58		58	38.73	42
Chicago (Metra North Central Corridor)	Recommended	177.90	110.90	62		62	66.98	38
Cincinnati (I–71 Corridor)	Not Recommended	874.70	431.20	49		49	443.50	51
Cleveland (Euclid Corridor Improvement Project)	Recommended	220.00	135.00	61	50.00	84	35.00	16
Hartford (New Britain-Hartford Busway)	Recommended	80.00	51.60	65	12.38	80	16.02	20

FTA FFGA STATUS—Continued

City/Project	Overall project rating	Total Project Cost	Section 5309 new starts share requested	New starts share percent of total project cost	Other federal funds proposed	Federal funds percent of the total project cost	Non-federal share of project cost	Non-federal percent of total project cost
Houston (Downtown to Astrodome Corridor Light Rail).	Recommended	300.00	64.90	22	36.00	34	199.12	66
Kansas City, Johnson County (I–35 Commuter Rail) [1].	Not Rated	30.90	24.80	80		80	6.10	20
Las Vegas (Resort Corridor Fixed Guideway MOS)	Recommended	568.00	155.00	27	95.00	44	318.00	56
Maryland (MARC Commuter Rail Improvements Projects) [1].	Not Rated	85.10	40.90	48	13.50	64	30.70	36
Miami (East-West Multimodal Corridor)	Not Recommended	2,023.00	$808.00	40		40	1,215.00	60
Miami (North Corridor)	Not Recommended	615.20	430.60	70		70	184.56	30
Miami (South Miami-Dade Busway Extension)	Recommended	87.80	61.30	70	5.65	76	20.90	24
Nashville (East Commuter Rail Project) [1]	Not Rated	30.00	20.90	70	3.00	80	6.10	20
New York (Long Island Rail Road East Side Access Project).	Recommended	4,350.00	$2,175.00	50		50	2,175.00	50
Norfolk (Norfolk-Virginia Beach Corridor LRT)	Not Recommended	524.60	288.50	55	29.40	61	206.70	39
Orange County (The Centerline Orange County Rail Corridor).	Recommended	2,015.80	1,009.10	50	405.38	70	601.34	30
Phoenix (East Valley Light Rail Transit)	Not Recommended	883.90	441.90	50		50	442.00	50
Raleigh (Phase I Triangle Regional Rail Project)	Not Recommended	284.00	111.00	39	45.00	55	128.00	45
San Diego (Mid Coast Corridor Project)	Highly Recommended	123.00	48.30	39		39	74.65	61
San Diego (Oceanside Escondido Rail Project)	Highly Recommended	253.50	152.10	60		60	101.40	40
San Francisco (Third Street Light Rail Project Phase 1.	Recommended	500.10			51.11	10	448.99	90
San Juan (Tren Urbano, Minillas Ext)	Recommended	478.30	382.60	80		80	95.70	20
Seattle (Everett to Seattle Commuter Rail) [1]	Not Rated	104.00	24.90	24		24	79.10	76
Seattle (Lakewood-to-Tacoma—Commuter Rail) [1]Not Rated.	86.00	24.90	29		29	61.10	71	
Tampa (Tampa Bay Regional Rail)	Not Recommended	953.80	476.90	50		50	476.92	50

Washington DC (Dulles Corridor Rapid Transit)	Recommended	279.70	217.80	78	6.00	80	55.95	20
Subtotal	17,452.20	8,648.40	50	766.42	54	8,037.31	46	
Total New Starts Pipeline	.....	36,348.67	19,020.31	52	2,480.01	59	14,848.35	41

[1] These projects are not rated based upon the exemption granted to projects where the anticipated Section 5309 New Starts share of the total estimated Capital Cost is below $25 million.

Question. Please detail by fiscal year and project how the FTA plans to allocate the $10,400,000 provided for Alaska or Hawaii projects. Include in your answer the total cost and the local/federal share of each project (in both dollar and percentage).

Answer. The amount available for Alaska and Hawaii projects is $10,203,219, after applying the government-reduction required by the fiscal year 2000 Consolidated Appropriations Act, and the oversight take-down. FTA plans to allocate the funds equally (50/50) between the two states as was done in fiscal year 1999. If an allocated amount remains unobligated by either state at the end of the period of fund availability—the year of appropriation plus two years—then funds may be reallocated to the other state. To date, no funds have been obligated by either state.

Applications from the State of Alaska have been received for a total project cost amount of $13.5 million ($10.8 million or 80 percent Federal share) to date. The applicant, in light of New Starts and other legislative requirements, is currently revising its applications.

Question. What is the "lifespan" of a Record of Decision? Does it lapse, or need to be renewed if a project does not go forward after a length of time?

Answer. An environmental Record of Decision (ROD) does not have a lifespan; however, the final Environmental Impact Statement (EIS) upon which a ROD is grounded does. If, after release of the final EIS, there is a lull of three or more years in major project activities such as final design, major work on land or vehicle acquisition, substantial site preparation or other construction activities, then, prior to any new FTA approvals or grants for the project, the final EIS must be re-evaluated. The purpose of this reevaluation is to determine whether there have been changes in the project, in the affected communities or in the affected natural environment, or changes in relevant laws and regulations such that the project would cause new, significant impacts not evaluated in the final EIS. If new, significant impacts are not found, the original ROD stands. This reevaluation and the resulting conclusions must be done in writing. If new, significant impacts are found, then a supplemental environmental review would have to be conducted to reconsider the earlier decisions on the project itself, on the project design, and on the mitigation of adverse impacts. The new environmental review would have to be documented in a supplemental EIS and a new or revised ROD.

Question. What new starts projects does FTA anticipate will be requesting an amended full funding grant agreement during the balance of this calendar year:

Answer. FTA anticipates requests for amendments to the following FFGAs in calendar year 2000:

—BART—Extension to San Francisco Airport—The Amendment will delete rail cars and add maintenance facility improvements. There is no increase in the Section 5309 share of the project.

—South Boston Piers Transitway—The Amendment will add formula funds to the project to cover cost increases. There is no increase in the Section 5309 share of the project.

—Houston—Regional Bus Plan—The Amendment will delete some bus projects and add other new bus projects. There is no increase in the Section 5309 share of the project.

Question. Please list those current FFGA projects which have undergone significant change in scope or cost increases beyond and above the original project scope and baseline cost estimate. Please provide a brief summary of the project's description, current status, reason for cost increases or scope changes, and pending issues.

Answer. The following FFGA projects have undergone significant scope change:

—*New Jersey Transit Corporation (NJT) Hudson-Bergen Waterfront Light Rail Transit System first Minimum Operable Segment (MOS–1).*—The New Jersey Corporation Hudson-Bergen Waterfront Light Rail Transit System Minimum Operable Segment (MOS–1) is a 9.3 miles, 16-station light rail system from 34th Street in Bayonne on the south to Hoboken Terminal on the north. Opening April 15, 2000, on schedule and under budget, is Phase A, from Exchange Place south to 34th Street in Bayonne and West Side Avenue in Jersey City. Phase B, covering the last 2.0 miles between Exchange Place and Hoboken Terminal is in construction and will open for revenue service in April 2002. Because of Hoboken community preference, the alignment changed in 1997 from the East Side to the West Side of Hoboken (Phase B) necessitating further environmental work and delaying construction on the last two miles of the project. No issues are pending and there is no increase in the Federal share of the project.

—*Bay Area Rapid Transit District (BART) Extension to San Francisco Airport.*—The Bay Area Rapid Transit District (BART) Extension to San Francisco Airport project consists of 8.7 miles double track (6.0 miles is subway, 1.5 miles at grade and 1.2 miles elevated), 3000 parking spaces and transfer to Caltrain

commuter rail at Millbrae, 1,000 parking spaces at San Bruno and 1,330 parking spaces at South San Francisco. Construction of the airport extension is about 50 percent complete. Project cost increases resulted from: 1) cost increases for material and labor because of a booming local economy and heavy competition for materials and labor; 2) rising real estate costs and difficulty in negotiating settlements with 7 local cemeteries; and 3) an increase in financing costs stemming from shortfall in Federal appropriations scheduled in Full Funding Grant Agreement. The proposed scope change consists of substituting a $70 million shop and yard improvement program in place of the originally planned acquisition of twenty-eight (28) vehicles. This substitution will change the Revenue Operation Date (ROD) from September 1, 2001 to July 1, 2002, with an overall project completion date of January 31, 2003. The financing arrangements for the project will increase the local funding by $316 million, for a revised budget of $1,483 million and establish a new Capital Reserve Account (CAPRA) capable of providing up to $27 million of local funds for any future potential cost increases. No issues are pending and there is no increase in the Federal share of the project.

—*Tren Urbano.*—This corridor is a 17-kilometer (10+ miles) fixed guideway transit system that includes 16 stations. The project Construction is 62.5 percent complete as of March 2000. The FFGA was modified on July 19, 1999 to amend the scope and the special terms and conditions and to recognize the increase in total project cost from $1,250.3 million to $1,653.6 million. The modification authorized the use of urban area formula and flexible funds for the project ($141 million formula funds and $259.9 million flexible funds); extended the revenue operation date until May 31, 2002; and referenced the standard terms and conditions applicable to this project. The reason for the cost increases was largely due to contract bid over the costs estimates, the addition of two stations and increased construction management fees. Pending issues include several Quality Assurance/Quality Control items and the Settlement and Forbearance Agreement for Centro Médico and there is no increase in the Federal share of the project.

—*South Boston Piers Transitway.*—This project is a 1-mile underground transit tunnel from the existing South Station to the World Trade Center. Three underground Transitway stations are at South Station, the new Federal Courthouse/Fan Pier, and the World Trade Center will provide connections to the existing Red Line as well as commuter and inter-city rail and bus services. The operating vehicle is a 60-foot, dual-powered, trackless electric trolley/diesel articulated bus.

—An important feature of the Transitway Project is that the underground alignment in the vicinity of South Station as well as the World Trade Center area is coincident with the $13.1 billion Central Artery/Tunnel (CA/T) Project that is currently in construction. This approach provides significant savings and reduced disruption for the local community. The project is in final design and construction. To date, six of the nine construction contracts are underway, including the work associated with the three joint CA/T contracts. Bids for vehicle procurement were received in September 1999. The MBTA expects a vehicle procurement award in late April 2000. The three remaining construction contracts are to be advertised and awarded by the MBTA by the second quarter of 2001, and have an estimated value of approximately $60 million. To date, $231 million has been expended.

—The baseline estimate for the full funding grant agreement in 1993 dollars was estimated to be $413 million, and an original revenue operation date of December 31, 2000. The MBTA has submitted a "recovery plan" in January 1999 and a draft "Restated Project Budget, Scope of Work, and Schedule" in March 2000. These documents indicate the project budget has increased to $601 million and the revised revenue operation date is December 31, 2003. The FTA has requested and received a "Finance Plan" in late February 2000. A review by FTA, GAO and the OIG is ongoing; however, there is no increase in the Federal share of the project.

—Although the project scope has not changed, the MBTA has managed to enhance the level of service that this project will provide when revenue service begins in 2003. In lieu of transit service from South Station to the World Trade Center, the Transitway project will provide for enhanced service with the integration of Massport's Airport Intermodal Transit Connector project. This will result in service from South Station to Logan Airport via the CA/T's Ted Williams Tunnel.

—Also, as a result of a "Restated Project Budget, Scope of Work, and Schedule", coupled with three CA/T joint construction contracts, prevalent area bidding

market conditions, impacts of encountering differing site conditions and complications during design, the budget has now grown to $601 million.

—The outstanding issues are both technical and procedural. Technically the project depends on the successful completion of the CA/T joint construction contracts, as well as the sophisticated work associated with constructing a tunnel under existing historic structures. Procedural issues include completion of the review and acceptance of the MBTA's Finance Plan for this project and the finalization of the amended FFGA.

—*Los Angeles MTA.*—The Los Angeles Metro Transit Authority Red Line Project was planned, programmed and constructed in phases through a series of "minimum operable segments" (MOSs). The 4.4 mile, 5 station segment of MOS–1 opened for revenue service in January 1993. A 2.1 mile, three station segment of MOS–2 opened along Wilshire Boulevard in July 1996. An additional 4.6 mile, 5 station segment in MOS–2 opened along Vermont Avenue & Hollywood Boulevard in June 1999. The 6.3 mile North Hollywood segment of MOS–3 is currently under construction.

—Currently Segments 1 and 2 are in operation carrying approximately 60,000 passengers per day. The Segment 3, North Hollywood Extension is in the system test and start-up phase with some surface construction work remaining at the station locations. Revenue operations for this extension are currently anticipated in the June/July 2000 timeframe, well in advance of the December 2000 FFGA date.

—The original MOS–3 consists of three extensions, North Hollywood, East Side and Mid City, all funded under a single FFGA and each planned with separate revenue operations dates. The East Side and Mid City extensions as originally planned have been indefinitely suspended and those corridors are the subject of ongoing alternative alignment studies. As a result of LACMTA's financial condition, the FTA took action to segregate the Segment 3 scope, schedule and budget in the three distinct project elements. This action has resulted in the establishment of a Revised and Restated FFGA for the North Hollywood Extension. Like action for the remaining two project elements is pending LACMTA's ongoing corridor studies and project re-evaluations. This may ultimately result in three separate FFGAs pending MTA's ability to demonstrate financial and technical capacity; however, there is no increase in the Federal share of the project.

—The MTA has undertaken a series of regional transit alternatives analysis studies addressing the reformulation of the East Side, Mid City and other transit Corridors. On February 24, 2000, the MTA Board addressed the results of the studies to date for the East Side Corridor. The Board voted to continue and narrow the study of an alignment for the East Side that begins at Union Station and terminates at the intersection of Beverly and Atlantic Boulevard. This alignment includes a section of tunnel through the Boyle Heights area between First and Boyle and First and Lorena streets. In the February meeting, the Board also directed the continuation of studies in the other corridors. Further action addressing the studies was taken at the March 2000 Board meeting, modifying the 'Exposition Right-Of-Way' alignment to be studied for the Mid City/West Side corridor. This alignment is in addition to the alignment designated at the February Board meeting.

—The Bus Consent Decree was established in October 1996 to resolve a law suit brought by the 'Bus Riders Union'. The Decree requires that the bus loading along heavily traveled corridors be reduced in three steps. Initially the loading was to be reduced to a factor of 1.35 (in other words no more than 35 percent of the seated capacity of the bus could be standees) by December 1997. Defining the exact methodology for determination of compliance has been the subject of several hearings before the 'Special Master' identified in the Decree and the Federal Court. The second step is to achieve a load factor of 1.25 by June 2000. The third step requires that the MTA achieve a load factor of 1.2 by June 2001.

—As a result of the interpretation of the load factor requirements, the Special Master ordered the MTA to procure 532 additional buses over the 2,095 it had already planned to purchase. MTA petitioned the Special Master for relief. In May 1999 the Special Master reduced the requirement to 481 additional buses. The MTA has further appealed to the 9th Circuit Court, which has issued a 'stay' of the lower Court's order while it considers the MTA's appeal. The hearing process is anticipated to continue through the June 2000 timeframe.

Question. What triggers a baseline financial review of a new starts full funding grant agreement by Inspector General?

Answer. The OIG has indicated to FTA that there are no specific factors that trigger an audit. Departmental and congressional inquiries are given priority. The OIG attempts to survey projects on a continuing basis to see if any emerging issues such as large cost increases or lengthy schedule delays may indicate vulnerabilities.

Question. Please list all current, pending or anticipated full funding grant agreement projects (those expected to be signed by the end of fiscal year 2001, and included in the administration's budget request). Please also note whether or not each project has a record of decision, when the ROD was approved, and if no ROD, when the ROD is anticipated. Note the date the FFGA was approved, or if pending or anticipated, what approximate date FTA believes the FFGA will be approved. Note the project total cost estimate, the federal share, the local share, and a summary of the most recent project evaluation.

Answer. The following table lists all current, pending or anticipated FFGAs expected to be signed by the end of fiscal year 2001:

CURRENT FFGAs AND PROPOSED FFGAs

Project	ROD approval date actual/ anticipated	FFGA approval date or anticipated 60 day letter to congress	Project total cost estimate	Requested federal 5309 share	Non-5309 federal share	Local share	Project evaluation
Under FFGA:							
Atlanta—North Springs		20-Dec-94	$463.18	$370.54		$92.64	
Los Angeles—North Hollywood		14-May-93	2,781.09	1,416.49	$377.15	987.45	
Boston—Piers—MOS–2 (So. Sta. to Wo. Tr.)		5-Nov-94	413.40	330.73		82.67	
Portland—Westside/Hillsboro extension		29-Sep-92	963.72	630.07	74.00	259.65	
Houston—Regional Bus Plan		30-Dec-94	625.00	500.00		125.00	
MARC—Commuter Rail Improvements		19-Jun-95	131.56	105.26		26.31	
Salt Lake City—South LRT		2-Aug-95	312.49	243.99	4.00	64.50	
San Juan—Tren Urbano		19-Jul-99	1,653.00	307.40	400.90	944.70	
Denver SW Corridor LRT		9-May-96	176.32	120.00	18.88	37.44	
SF Area—San Jose Tasman West LRT		2-Jul-96	325.00	182.75	57.94	84.31	
St. Louis St. Clair MetroLink Extension [Phase IIa]		17-Oct-96	339.20	252.41		86.79	
NJ Urban Core—Hudson-Bergen LRT		15-Oct-96	992.14	604.09	281.65	106.40	
Sacramento LRT Extension		20-Jun-97	222.00	113.19		108.81	
SF Area—BART Airport Extension		30-Jun-97	1,510.20	750.00		760.20	
Dallas—North Central LRT Extension		6-Oct-99	517.20	333.00		184.20	Recommended.
Subtotal—under FFGA	11,425.50	6,259.92	1,214.52	3,951.07			
Fiscal year 2000 proposed FFGAs:							
San Diego—Mission Valley East LRT Extension	Aug. 1998	17-Mar-00 [1]	431.00	330.00	13.70	87.30	Highly Recommended.
Newark Rail Link (MOS–1)	Nov. 1998	May 2000	207.70	142.00	25.30	40.40	Highly Recommended.
Fort Lauderdale—Tri-Rail Commuter Rail Upgrade	Nov. 1999	23-Feb-00 [1]	327.00	110.50	91.41	125.09	Recommended.
Subtotal—Fiscal year 2000 proposed FFGAs	965.70	582.50	130.41	252.79			
Fiscal year 2001 proposed FFGAs:							
Portland—Interstate MAX LRT Extension	Jan 2000	Sep 2000	350.00	257.50	24.00	68.50	Highly Recommended.
Seattle—Central Link LRT	Jan 2000	Sep 2000	1,500.00	500.00		1,000.00	Highly Recommended.

Chicago—Douglas Branch Reconstruction	May 2000	Nov 2000	450.80	320.10	0.03	130.67	Highly Recommended.
Northern NJ—Hudson-Bergen LRT—MOS–2	Oct 1996	May 2000	1,112.80	721.60	273.85	117.35	Recommended.
Pittsburgh—Stage II LRT Reconstruction	Feb 1996	Sep 2000	383.70	100.20	10.23	273.27	Recommended.
Memphis—Medical Center Extension	Apr 2000	Nov 2000	69.10	55.30	.....	13.80	Recommended.
Salt Lake City—CBD to University LRT	Dec 1999	Oct 2000	105.80	84.60	.....	21.20	Recommended.
Minneapolis—Hiawatha Corridor LRT	Apr 2000	Sep 2000	548.60	274.30	.....	274.30	Recommended.
Denver—Southeast Corridor LRT	Mar 2000	Nov 2000	882.50	525.00	.....	357.50	Recommended.
Baltimore—Central LRT Double-Tracking	Summer 2000	Nov 2000	153.70	120.00	2.95	30.75	Recommended.
Washington, DC/MD—Largo Extension	Feb 2000	Oct 2000	433.90	260.30	3.20	170.40	Recommended.
Chicago—Metra Southwest Corridor Commuter Rail	Summer 2000	Dec 2000	165.50	103.90	.....	61.60	Highly Recommended.
Subtotal—Fiscal year 2001 proposed FFGAs	6,156.40	3,322.80	314.26	2,519.34			
Grand totals	18,547.60	10,165.22	1,659.19	6,723.20			

[1] Submitted to Congress.

NEW STARTS EVALUATION CRITERIA

Question. How has FTA's application of the TEA–21 new starts project evaluation criteria been modified over the last year? Please discuss any changes in how the evaluation process is performed and how the resulting ratings translate into a funding recommendation from the FTA, or in recommendation to proceed to a full funding grant agreement.

Answer. FTA's application of the New Starts criteria has not been significantly modified over the last year. As was done last year, FTA analyzes the information submitted by project sponsors and assigns a rating of high, medium-high, medium, low-medium, or low to each of the individual project justification criteria and to the measures for local financial commitment. These criteria/measure-specific ratings are then combined into summary project justification and finance ratings. These summary ratings are in turn used to determine overall project ratings according to the following decision rule:

—*Highly Recommended.*—Projects must be rated at least medium-high for both finance and project justification;

—*Recommended.*—Projects must be rated at least medium for both finance and project justification;

—*Not Recommended.*—Projects not rated at least medium in both finance and justification will be rated as not recommended.

These ratings serve as inputs to Federal budget decisions, but do not in and of themselves translate directly into a funding recommendation or commitment. Rather, FTA must also consider (1) the readiness of projects to enter into full funding grant agreements (FFGAs), and (2) the amount of commitment authority available on an annual basis, and where that commitment is allocated. It is these considerations which have been modified and enhanced since last year, as described below:

1. FTA's "project readiness" screen reflects project sponsor's technical capability to construct the project (as required by both ISTEA and TEA–21), and ensures that projects proposed for an FFGA will be ready to enter into such an agreement during the fiscal year for which it is proposed. FTA used such a screen for development of the fiscal year 2000 budget; however, the fiscal year 2001 screen has been enhanced to reflect key project development milestones and issues:

—the anticipated dates for a Record of Decision (ROD) or Finding of No Significant Impact (FONSI) for each project (thus signifying the completion of all Federally-required environmental work); and

—the date that the project sponsor could adequately demonstrate its technical capability to be approved by FTA to advance into final design. Specifically, FTA considered the anticipated date for a Record of Decision (ROD) or Finding of No Significant Impact (FONSI) for each project (thus signifying the completion of all Federally-required environmental work); approval of a project's management plan (PMP); and acceptance of a fleet management plan, and

—the identification of all other outstanding issues and concerns—and actions to be taken by the project sponsor to resolve them—before FTA will enter into an FFGA on the project. Such concerns may include reaching an acceptable level of design to finalize project costs; securing any uncommitted local funding; and addressing all outstanding right-of-way and real estate issues.

For the fiscal year 2001 budget, FTA used its project management oversight resources to carefully review the reasonableness of project development schedules, and established an earlier readiness threshold of summer 2000 to be in final design than for fiscal year 2000 (ROD/FONSI by October 1999). This readiness threshold is consistent with guidance in the Conference Report accompanying the fiscal year 2000 Department of Transportation Appropriations Act. The result of this enhanced readiness review is that FTA is much more confident that all outstanding local issues will have been adequately addressed for each project prior to execution of an FFGA.

2. FTA also considers the overall level of New Starts funding made available in metropolitan areas and states. FTA is hesitant to administer multiple concurrent FFGAs to a single grantee or in a single region, as FTA wants to ensure that a grantee is not be overburdened by multiple commitments and has the financial resources and technical capacity to carry out a project.

Question. Please prepare a table indicating the projects that are likely to be ready for FFGAs in the near term (fiscal years 2000 through 2003). Include current stage of project development, project description, estimated record of decision date, and estimated federal share.

Answer. Nineteen projects are likely to be ready for FFGAs in the near term. These include the 15 projects (pending and recommended FFGAs) in the President's fiscal year 2001 budget request and 4 additional projects expected to be ready in fiscal year 2002. The table follows:

PENDING, RECOMMENDED, AND POSSIBLE FUTURE FULL FUNDING GRANT AGREEMENTS

Project	Stage	Actual or estimated record of decision date	Requested section 5309 funding	Description
San Diego—Mission Valley East LRT Extension	FD	Aug. 1998	$329,958,000	A 5.9-mile, 4-station light rail extension of existing Blue Line, from east of I–15 to La Mesa, where it will connect to existing Orange Line; includes elevated, at-grade, and tunnel portions; includes 2 park and ride lots and a new access road.
Newark Rail Link (MOS–1)	FD	Nov. 1998	141,950,000	A 1-mile light rail extension of existing Newark City Subway to be built mostly at-grade from Newark's Penn Sta. to Newark's Broad St. Sta.; will add 4 stations to existing 11-station system; MOS–I is first segment of a proposed 8.8-mile, 15-station extension from downtown Newark to downtown Elizabeth, with a stop at Newark International Airport; will connect two major rail lines that serve downtown Newark with light rail service.
Fort Lauderdale—Tri Rail Commuter Rail Upgrade	Completed PE	Nov. 1999 [1]	110,500,000	Will double-track 44.31 miles of 71.1-mile commuter rail corridor (26.79 miles of double-tracking included in Segments 1–4; includes construction/replacement of bridges and modification/renovation of stations to accommodate second mainline track, right-of-way and easement acquisitions, design/construction of new maintenance and layover facility, and revenue rolling stock acquisition; includes safety improvements on entire 71.7 mile corridor.
Hudson-Bergen MOS–2	FD	Oct. 1996	721,600,000	A 6.1-mile, 7-station extension connecting 3 intermodal transfer sites and 2 park and ride lots; will be constructed in 3 phases: 5.1-miles extending north from Hoboken Terminal through the Weehawken Tunnel below Bergenline Ave. to an at-grade station at Tonnelle Ave. in Jersey City, the tunnel itself, and a 1-mile southerly extension from 34th St. to 21st St. in Bayonne; the second of 3 minimum operable segments of a $2 billion, 20.1-mile, 30-station LRT.
Portland—Interstate MAX LRT Extension	FD	Jan. 2000	257,500,000	A 5.6-mile, 10-station extension of the Metropolitan Area Express (MAX) light rail system, connecting Portland's CBD with the regional Exposition Center in north Portland; will connect with existing 33-mile East/West MAX line at Rose Quarter Sta.
Seattle—Central Link LRT MOS–1	FD	Jan. 2000	500,000,000	A 7.2-mile, 10-station light rail transit project (Link LRT) running southeast from NE 45th St. to South Lander St., operating through the 1.6-mile Downtown Seattle Transit Tunnel; first minimum operable segment of a 23.5-mile, 23-station LRT system running north to south from Northgate, through downtown Seattle, Southeast Seattle and the cities of Tukwila and SeaTac; LRT is one element of a $3.914 billion regional transit plan.
Chicago—Douglas Branch Reconstruction	Completed PE	May 2000	320,100,000	Complete reconstruction of 6.6-mile, 11-station Douglas Branch of Blue Line, extending from Cermack Avenue to a point just west of downtown Chicago; addresses high maintenance and operating costs resulting from age-related deterioration since segments on line opened from 1896 to 1910, with upgrades made through mid-80s.

PENDING, RECOMMENDED, AND POSSIBLE FUTURE FULL FUNDING GRANT AGREEMENTS—Continued

Project	Stage	Actual or estimated record of decision date	Requested section 5309 funding	Description
Pittsburgh Stage II LRT Reconstruction	FD	Feb. 1996 [1]	100,200,000	First segment of second phase of reconstruction of old 25-mile trolley lines to modern LRT standards; includes reconstruction of 6.3 miles on both the Overbrook Line and a portion of the Library Line, construction of 2,400 park-and-ride spaces, and purchase of 28 LRT vehicles.
Memphis—Medical Center Extension	PE	Apr. 2000 [1]	55,300,000	A 2.5-mile, 6-station light rail extension to the Main St. Trolley/Riverfront Loop village rail system, expanding service from the CBD east to the Medical Center area; will be designed to accommodate light rail vehicles but vintage rail cars will be used until proposed regional LRT line is implemented and fleet of modern LRT vehicles is acquired.
Salt Lake City—CBD to University LRT	FD	Dec. 1999	84,600,000	A 2.5-mile, 4-station light rail extension in eastern Salt Lake City, from the downtown area to Rice-Eccles Stadium on the University of Utah campus; will connect with existing 15-mile North/South LRT line at Main Street.
Minneapolis—Hiawatha Corridor LRT	Completed PE	Apr. 2000	274,300,000	An 11.5 mile, 15-station light rail line linking downtown Minneapolis, the Minneapolis-St. Paul International Airport, and the Mall of America in Bloomington; will operate along the corridor following Hiawatha Avenue and Trunk Highway 55; will tunnel under runways and taxiways for .8 miles.
Denver—Southeast Corridor LRT	Completed PE	Mar. 2000	525,000,000	A 19.4-mile, 14-station double-tracked light rail line between downtown Denver and Lincoln Ave. in Douglas Cnty. along I–25, with a spur along I–225 to Parker Rd. in Arapahoe Cnty.; will operate over an exclusive right-of-way and connect with existing Central Corridor LRT in downtown Denver and Southwest LRT currently under construction; part of a multimodal program of highway and transit improvements.
Baltimore—Central LRT Double-Tracking	FD	Summer 2000	120,000,000	Will double-track 8 single-track sections totaling 9.4 miles of 29-mile Central Corridor Light Rail Line, all of which are almost entirely in existing right-of-way and located between Timonium and Cromwell Station/Glen Burnie; includes construction of second station platforms at 4 stations, bridge and crossing improvements, bi-directional signal system with traffic signal preemption on Howard St., and catenary and other equipment and systems.
Washington, DC/MD—Largo Extension	Completed PE	Feb. 2000	260,300,000	A 3.1-mile, 2-station extension of the Blue Line from Addison Rd. to Largo Town Center in Prince George's Cnty., MD; Maryland Mass Transit Administration managed project through PE, WMATA will undertake final design/construction and operate as an integral part of regional Metrorail system.

Chicago—Metra Southwest Corridor Commuter Rail	PE	Summer 2000	103,860,000	An 11-mile, 2-station extension to South West commuter rail line, a 29-mile line providing service from Orland Park, IL to downtown Chicago; extends from existing station at 179th St. in Orland Park southwest to Manhattan, IL; includes 3 miles of double-tracking, parking facilities, track/signal/station improvements, expansion of 2 existing rail yards, construction of third rail yard, rehab of bridges, purchase of 2 diesel locomotives and 13 bi-level passenger cars, and relocation of downtown Chicago terminal from Union Sta. to LaSalle St. Sta.
San Diego—Oceanside-Escondido Rail Project	PE	Mar. 1997 [1]	152,100,000	A 23.7-mile, 15-station rail transit line using diesel multiple unit rail vehicles; 22 miles in on existing freight railroad corridor running east from Oceanside through Vista and San Marcos to Escondido; includes 1.7 miles of new right-of-way to serve campus of California Statue University San Marcos.
Chicago CTA—Ravenswood Line Expansion	PE	Aug. 2000 [1]	245,500,000	Station expansions and tracking improvements to increase capacity on the 9.3-mile, 19-station Ravenswood Line (AKA Brown Line); built between 1900 and 1907, line extends from Ravenswood on the north side of Chicago, past Wrigley Field to the downtown Loop.
Miami—South Miami-Dade Busway Extension	PE/FD	Aug. 2000 [1]	61,300,000	An 11.5-mile, 12-station busway extension to existing 8.3-mile South Busway; will run along US Route 1, between Cutler Ridge Mall near SW 200 St. and Florida City; final design on 5-mile portion is underway and remaining 6.5-mile segment is in preliminary engineering.
Cleveland—Euclid Corridor Improvement Project	PE	Aug. 2000 [1]	135,000,000	A 9.8-mile transit corridor along Euclid Ave. from Public Square in downtown Cleveland east to University Circle; includes creation of a 2.43-mile exclusive bus rapid transit segment (BRT), improvements to two streets, and creation of a Transit Zone with exclusive transit lanes on two streets; BRT will be served by 60-foot electric trolleybuses with doors on both sides of bus.

[1] Fining of no significant impact instead of ROD.
PE—Preliminary Engineering.
FD—Final Design.

TIFIA LOANS

Question. Please list any new starts projects or other transit grantees that received TIFIA loans in fiscal years 1999 and 2000, and the amount of each loan. What are the terms of these loans? What transit projects currently have pending applications for the next round of TIFIA loans?

Answer. To date, only two transit projects have been approved to receive credit assistance through TIFIA. The Washington Metropolitan Area Transit Authority (WMATA) received a $600 million guarantee on a loan made by Lehman Commercial Paper, Inc. The guarantee allows WMATA to advance several major contracts for its capital improvement program. The Puerto Rico Highway and Transportation Authority (PRHTA), is currently negotiating a $300 million loan for the Tren Urbano, Phase I (a FFGA project). The purpose of the loan is to assure timely completion of the project and to lower the capital cost of the local matching funds. The next phase (FY–2000) of the TIFIA program has not been announced to date, so there are no pending applications. However, FTA has received expressions of interest from major transit projects in New York, New Jersey, and California.

LOS ANGELES TRANSIT PROJECTS

Question. On February 24, 2000, Los Angeles County MTA (LACMTA) Board selected and approved locally preferred alternatives for the Eastside, Mid City/Westside, and San Fernando Valley corridors of the Los Angeles Metro project. Please describe each of the three corridor project alternatives that were selected, and summarize the current level of completion, federal funding received thus far, estimated total project cost, federal share, local match percentage and amount, and estimated construction/completion schedule for each.

Answer. The LACMTA Board selected bus rapid transit (BRT) options for the Mid City and San Fernando Valley corridors and approved further consideration of BRT and Light Rail Transit (LRT) in the Eastside corridor. The next step is for the Board to formally identify the Locally Preferred Alternatives (LPA) in accordance with FTA's major investment requirements. The following excerpt from the Board meeting provides additional description of the corridor alternatives:

—*Eastside.*—Light Rail Transit (LRT) from Union Station to Atlantic via First Street with the specific choice of tunneling through Boyle Heights from 1st and Boyle to 1st and Lorena, then transitioning to Third Street and proceeding east via Third Street/Beverly Boulevard to Atlantic, with the policy direction from the Board that the preferred mode of transportation would be light rail.

—*Mid-City/Westside.*—Bus Rapid Transit (BRT) on Wilshire Boulevard from Vermont Avenue to downtown Santa Monica, with consideration of minimal operable segments to San Vicente Boulevard (east of La Cienega), Santa Monica Boulevard and San Vicente Boulevard (west of I–405), including a study of a busway route

—*San Fernando Valley.*—Bus Rapid Transit (BRT) along the Burbank-Chandler right-of-way from the North Hollywood Red Line Station to Warner Center, with consideration of a minimal operable segment between Woodman Avenue and Balboa Boulevard with rapid bus connections at each end. With completion of the Regional Alternatives Analysis and identification of LPA's, LACMTA can request FTA approval to enter Preliminary Engineering and develop the Draft and Final Environmental Impacts. A Section 5309 grant of $11.9 million was provided to MTA to support the planning effort for the reformulated Mid City and East Side projects.

The capital funding plan adopted by the MTA Board at its February 24 meeting is displayed below. As the projects are yet to be defined, no schedule for their completion has been developed and the Total Cost figures should be viewed as very rough order estimates.

PRELIMINARY CAPITAL FUNDING PLAN EXCERPT FROM 2/24/00 MTA BOARD MEETING MINUTES

[In millions of dollars]

Corridor	Total cost in fiscal year 2004 dollars	Federal FFGA	SB45 [1]	Local	New state
East Side	704	352	116	.....	236
Mid-City	590	295	44	.....	251

PRELIMINARY CAPITAL FUNDING PLAN EXCERPT FROM 2/24/00 MTA BOARD MEETING MINUTES—Continued

[In millions of dollars]

Corridor	Total cost in fiscal year 2004 dollars	Federal FFGA	SB45 [1]	Local	New state
San Fernando Valley	291	.....	.....	$146	145
Total	1585	647	160	146	632

[1] State SB45 funds in the amount of $116 million for the East Side and $44 million for Mid City reserved by prior Board action will be applied to those corridors.

LOS ANGELES TRANSIT PROJECTS

Question. Does the total combined federal cost of the selected panel of projects for Eastside, Mid City/Westside, and San Fernando Valley match the remaining amount of federal contingent commitment authority for Los Angeles Metro?

Answer. Los Angeles MTA has not selected a panel of projects therefore the federal cost estimate of the projects for Eastside, Mid City/Westside, and San Fernando Valley is not known at this time.

Question. What is FTA's official position on the remaining federal contingent commitment authority for Los Angeles Metro? What is the amount, excluding those funds associated with the North Hollywood FFGA?

Answer. All "contingent" commitments made during ISTEA were no longer "contingent" once the FTA new starts program was re-authorized by TEA–21. Thus, in principle, all the Full Funding Grant Agreements transacted during ISTEA that included "contingent" commitments will be honored with the 49 U.S.C. § 5309 new starts commitment authority currently available under TEA–21.

Insofar as the Mid-City and Eastside corridors of Los Angeles MOS–3, however, former FTA Administrator Linton wrote to LACMTA on October 28, 1999, stating "As you know, we advised you on July 15, 1999 that FTA no longer had a Federal commitment in either the Eastside or Mid-City corridors because both corridors lacked active projects." The letter further stated that FTA would consider the prior Federal commitment as an "other factor" in evaluating the identified projects once the LACMTA identified viable projects in those corridors but the projects will have to go through the rating process and be evaluated against competing uses of the funds. There remains $647.11 million of the original commitment to the projects that has not been appropriated.

ST. LOUIS METROLINK PROJECT

Question. Please update the Committee on what steps FTA and the project sponsors for the proposed St. Clair extension to Scott Air Force Base are taking to address concerns raised by the House and Senate Appropriations Committees and the Senate Banking Committee.

Answer. FTA is continuing to work with the Bi-State Development Agency to provide further evidence of the benefits of the project, including anticipated economic development at and around the proposed Scott-Shiloh station. Acting Administrator Fernandez and the Inspector General Ken Meade met with local officials on April 20 to further discuss how the Committee's concerns can be satisfactorily addressed.

SALT LAKE CITY TRANSIT PROJECTS

Question. Please list all the Salt Lake Organizing Committee requests for funding in fiscal year 2001. Which of these projects have been requested in the administration's budget?

Answer. The Department and FTA are supporting up to $50 million in Federal Transit funding to assist mass transportation for the 2002 Winter Olympics and Paralympics in Salt Lake City. The fiscal year 2000 Departmental Appropriations Act provided approximately $15 million for Olympics and Paralympics transportation activities, thus, the administration's budget is requesting $35 million in appropriations under the Section 5309 Bus and Bus Facilities program, consistent with the limit on the Department's and FTA's support for the games. The administration's budget does not request funding for particular projects, per se, but recently, in response to our request, the Salt Lake Organizing Committee submitted prelimi-

nary information outlining its Federal transit funding requests for fiscal year 2001 for the 2002 Winter Olympics and Paralympics, as follows:

[In millions of dollars]

Planning	2
Venue Loading and Unloading	5
Transit Bus	8
Bus Maintenance Facilities	2
Park-and-Ride	18
Total	35

TREN URBANO

Question. Please prepare a table showing the annual sources and uses of funds to pay for the capital costs of Tren Urbano at the current $1,676,000,000 cost to complete. Identify the specific amounts and sources of local and federal funding (Section 3, FHWA flex funding, block grant transfers, or other federal) planned to complete the current construction program, on an annual basis.

Answer. The table showing the annual sources and uses of funds to pay for the capital costs of Tren Urbano at the current $1,676,000,000 cost to complete is below.

[In millions of dollars]

	Section 5309	Section 5307	FHWA	Total Federal	State	Total
1996	7.4	20.8	.....	28.2	8.4	36.6
1997	6.1	20.2	.....	26.3	87.2	113.5
1998	15.0	20.0	31.7	66.7	268.3	335.0
1999	19.8	20.0	108.2	148.00	180.9	328.9
2000	82.0	20.0	40.0	142.0	199.8	341.8
2001	118.0	20.0	40.0	178.0	153.7	331.7
2002	59.1	20.0	40.0	119.1	47.0	166.1
Subtotal	307.4	141.0	259.9	708.3	945.3	1,653.6
Prior to FFGA	.....	5.0	.....	5.0	17.0	22.0
Total	307.4	146.0	259.9	713.3	962.3	1,675.6

Question. Please prepare a table showing the annual sources and uses of funds to pay for the capital costs of the Minillas extension of Tren Urbano. Identify the specific amounts and sources of local and federal funding (Section 3, FHWA flex funding, block grant transfers, or other federal) planned to complete the current construction program, on an annual basis.

Answer. Per Financial Plan dated August 1999, the PRHTA proposed to pay for the capital costs associated with Minillas from two sources: (1) Puerto Rico Highway and Transportation Authority (PRHTA) funds, including the proceeds of PRHTA bonds and short-term borrowing; and (2) FTA capital program funds (80 percent).

Fiscal year	Section 5309	Local share	Total
1999	.....	$1.2	$1.2
2000	$10.8	0.7	11.5
2001	57.8	14.5	72.3
2002	62.9	15.7	78.6
2003	70.4	17.6	88.0
2004	110.8	27.7	138.5
2005	69.9	17.5	87.4
Totals	382.6	94.9	477.5

SAN FRANCISCO BART

Question. What is the current schedule for completion of the BART extension to the San Francisco Airport? When will revenue service on this extension begin? How is the schedule for the on-airport project, which is being constructed with airport revenues, coordinated with the larger transit extension schedule?

Answer. The overall completion of the Bay Area Rapid Transit District (BART) extension to the San Francisco Airport which includes the maintenance shop modifications is January 2003. The current Revenue Operation Date (ROD) for service on the 8.7 mile subway extension to the San Francisco Airport is July 1, 2002. The work at the airport station, which is being constructed with airport revenues, is 82 percent complete which is ahead of the schedule for the larger transit extension.

Question. Has all right-of-way acquisition been completed for the Colma to Millbrae BART extension?

Answer. Approximately 95 percent of the right-of way has been acquired and the remaining acquisitions are not critical to the current schedule.

Question. What is the current estimate of the cost to complete the BART extension to the San Francisco Airport? How does this estimate compare to the original estimate at the time the FFGA was negotiated? Please identify by major cost activity or element what accounts for the increases in cost?

Answer. The current estimate for the Bay Area Rapid Transit District (BART) Extension to the San Francisco Airport is $1,483 million. The original Cost Estimate in the Full Funding Grant Agreement was $1,167 million. The cost increase of $316 million resulted from various factors:

[In millions of dollars]

Activity or element	*Increase*
Construction increased due to competitive factors, greater than budgeted escalation, omission of some scope from cost estimates and a premium for the risks associated with design-build implementation	146
Third party contracts increased due to additional oversight of the design-build contractors, more services required to purchase real estate than anticipated and an early start on public relations efforts	63
Force account costs increased due to re-evaluation of the cost of work to be performed	7
Right-of-way increased due to greater than anticipated real estate escalation and unanticipated utility relocation costs	65
Finance costs increased due to lower than anticipated federal appropriations	19
Project administration increased due to extending project and support staff through the revenue date and extending core project staff through claims and contract closeout	16
Total	316

GENERAL PROVISIONS

Question. Section 331 of Public Law 106–69 transferred funds made available under that Act and any prior year unobligated funds for the Charleston, South Carolina Monobeam Corridor project to the transit planning and research account. Please describe the Monobeam Corridor project; outline the project's funding history, including what funds presently remain unobligated; and explain why this project is more appropriately funded in the transit planning and research account than in the capital investment grants account.

Answer. The City of Charleston ("City"), South Carolina teamed up with FUTREX, Inc. to develop and conduct a full scale demonstration of FUTREX's System 21 Monobeam, elevated rail transit technology on a segment of about 1.2 miles of track and four vehicles. FUTREX anticipates that capital cost of the system would be in the range of one-half to one-third of competing transit technologies. Some of the advantages claimed of the system are its low footprint and modular light weight design while being capable of providing two-way, bi-directional operation on one slender elevated triangular guideway at passenger-carrying capacities exceeding 20,000 passengers per hour per direction. The full scale demonstration is estimated to cost about $35 million, which the partnership expects to raise from public and private sources. When fully developed, the City intends to use System 21 to link major employment, commercial and population centers in the greater Charleston area such as the Charleston International Airport, a new intermodal transportation center, the coliseum/convention center complex, various commercial

complexes and hotels, and the Charleston Visitor and Regional Transportation center.

In fiscal year 1998, Congress earmarked $1.5 million for Charleston, SC Monobeam rail project. The conference agreement provided the $1.5 million for conceptual planning and engineering, and related work for a full-scale demonstration monobeam rail line in the Charleston, South Carolina area. The available funding of $1,495,150 has been obligated with Futrex, Inc. providing $403,431 (approximately 21 percent match) as local share. Prior to the earmark, FUTREX and the City built a one-quarter scale model of the system with partial funding of $1,250,000 from the Economic Development Administration of the U.S. Department of Commerce.

In fiscal year 1999, Congress earmarked $2.2 million ($2,183,615 available after setting aside 0.75 percent for oversight). Obligation of this increment is pending.

Charleston Area Regional Transportation Authority (CARTA), the recipient of federal transit funds for the City of Charleston, and FUTREX are proposing to use the fiscal year 1999 earmark for the purpose of completing approximately 45,000 hours of final design and engineering of System 21 monobeam vehicles. Provided there are sufficient funds available upon completion of final design and engineering, the Monobeam Partnership will commission the fabrication of at least one of the four vehicles required for the demonstration of a 1.25-mile System 21 Prototype installation in Charleston. Futrex will provide a minimum of fifty percent local match for a total project budget of $4.4 million for the vehicle initiative.

For fiscal year 2000, Congress earmarked $2,500,000 ($2,452,697 available takedown of 0.75 percent for oversight and a reduction of 1.15 percent per the Consolidated Appropriations Act for fiscal year 2000). Obligation of fiscal year 2000 funds is awaiting development of the project scope of work.

Funding the Monobeam under the Transit Planning and Research Account would minimize Federal requirements as compared to those required under the New Starts program.

Question. Section 323 of Public Law 106–69 permanently amended TEA–21 to provide that Vermont and Oklahoma are authorized to use transit formula grants for capital improvements to, and operating assistance for, intercity passenger rail service. Have either of these States applied transit formula funds for intercity passenger rail purposes in fiscal years 1998, 1999, or 2000?

Answer. Vermont used $668,000 of formula funds in fiscal year 1999 and plans to use additional formula funds in fiscal year 2000 for intercity passenger rail purposes. To date, Oklahoma has not used formula funds for intercity passenger rail service.

Question. Please explain what the effect of the proposed new general provision section 327 in the budget request, regarding tribal governments, will be.

Answer. This General Provision is requested as part of the Job Access and Reverse Commute program set-aside for Indian Tribes. This change in Section 3037 of TEA–21 will allow tribal entities to apply for job access grants directly without being sponsored by the State. This will allow them sovereignty in receiving job access funds.

Question. Please explain what the effect of the proposed new general provision section 328, regarding technical direction and documentation of research and technology projects, will be.

Answer. The effect will be that sufficient funds will be set aside from every project to enable FTA to exercise responsible stewardship over project implementation and to ensure that the results are fully documented and shared with the transit community. Currently, that expense is negotiated with the grantee. This method is not always successful, depending on the flexibility of the grantee's internal budget. In the case where the grantee is not willing to set aside third party project review and reporting funds, the project may or may not be reviewed depending on the availability of project managers in FTA headquarters or regional offices and will likely not be documented in a report. This provision will require all grantees to make provisions for an outside review along with full documentation of the project. This process follows the requirements outlined in the Government Performance and Results Act (GPRA) mandating fully documented project planning, implementation, and review.

QUESTIONS SUBMITTED TO THE RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

NEW POSITIONS

Question. Please prioritize all the new positions requested for RSPA, including positions for Pipeline Safety.

Answer. The positions are identified as follows: (Funding for all new positions are requested at one-half of a FTE for fiscal year 2001.)

—Five positions, Office of Emergency Transportation. First position for a Regional Emergency Transportation Manager
—Second position for a Operations Chief
—Third position for a National Security Planner
—Fourth position for a National and International Disaster Specialist
—Fifth position for a Mitigation and Recovery Specialist
—Four positions, Office of Pipeline Safety. All four positions are for Inspectors to inspect new construction and to distribute greater volume of inspector time to damage prevention.
—Two positions, Office of Research and Technology. Both positions support the University Marine Transportation Grants Program.

HAZARDOUS MATERIALS SAFETY PROGRAM PERFORMANCE

Question. Please prepare a table indicating various measures of both the overall performance and the impacts of your program, showing statistical trends for each of the last ten years. Please include data on the number of serious releases (or an equivalent measure), fatalities, injuries, costs, compliance measures, etc.

Answer. The following table is provided:

Year	Total incidents	Serious [1] incidents	Fatalities	Injuries	Damages
1990	8,879	402	8	423	$32,353,276
1991	9,110	405	10	439	38,350,611
1992	9,310	376	16	604	35,164,057
1993	12,830	358	15	627	22,801,551
1994	16,087	427	11	577	44,185,413
1995	14,743	408	7	400	30,903,281
1996	13,950	466	120	1,175	46,849,243
1997	13,995	422	12	225	33,393,764
1998	15,349	432	13	198	45,796,084
1999	16,977	365	9	483	31,443,336

[1] RSPA defines a serious hazardous materials incident as one that involves a fatality or major injury due to a hazardous material, closure of a major transportation artery or facility or evacuation of six or more persons due to the presence of a hazardous material, or a vehicle accident or derailment resulting in the release of a hazardous material.

PERSONNEL ISSUES AND OPERATING EXPENSES

Question. What steps have been taken to comply with the staffing level that was approved by the conferees in fiscal year 2000? What is your current FTE strength? Why does the budget justification reflect a funding level of ½ work year per position for the annualization of fiscal year 2000 new positions?

Answer. The Office of Hazardous Materials Safety (OHMS)and the Research and Special Programs Administration's (RSPA) personnel office worked to recruit suitable candidates for all current and anticipated vacancies. Enacted appropriations for fiscal year 2000 gave OHMS a full-time permanent (FTP) position ceiling of 129 and full-time equivalent (FTE) funding for 125.5 positions. We currently are funding 121 FTE on board and are actively recruiting to fill the remaining positions, including new regional technical assistance positions and recent attrition vacancies. OHMS' new positions were requested and funded at one-half FTE each to reflect hiring no sooner than April of this fiscal year. Funding new positions for one-half of the first fiscal year is typically requested and enacted to allow time to fulfill administrative requirements (e.g., construction of work space, development of position descriptions and standards) for selecting highly qualified people.

Question. Please provide a table showing the authorized number of inspectors for each of the last three fiscal years, and the actual number of inspectors on-board during those periods.

Answer. The following table shows the authorized number of inspectors and the actual number of inspectors on-board for the last three years.

Fiscal year	Authorized	On-board
1997	37	36
1998	37	34
1999	37	37

Question. For each of the key offices under the Associate Administrator for Hazardous Materials Safety, please prepare a breakout of the number of personnel assigned to each office for each of the last three fiscal years, the grade level, and number of current vacancies.

Answer. The following table summarizes the on-board staff count, grade levels, and current vacancies in OHMS for the last three years.

Office	Fiscal year					
	1998—as of 4/15/98		1999—as of 4/5/99		2000—as of 4/5/00	
	No. of positions/ vacancies	Grade levels	No. of positions/ vacancies	Grade levels	No. of positions/ vacancies	Grade levels
Associate Administrator & Int'l Standards	6/1	2–SES	6/0	2–SES	6/1	1–SES
		1–15		1–15		1–15
		1–14		1–14		1–14
		1–13		1–13		1–13
		1–7		1–8		1–8
						1–7
Standards	20/1	2–15	19/3	2–15	17/2	2–15
		5–14		5–14		3–14
		2–13		3–13		3–13
		4–12		4–12		4–12
		3–11		1–11		2–9
		3–7		1–9		2–7
		1–6		2–7		1–6
				1–6		
Technology	18/1	2–15	18/1	2–15	19/0	2–15
		3–14		3–14		3–14
		8–13		11–13		11–13
		2–12		1–7		1–7
		1–11		1–6		1–6
		1–7				
		1–6				
Exemptions & Approvals	15/2	1–15	15/2	1–15	17/0	1–15
		1–14		2–14		2–14
		6–13		6–13		6–13
		3–12		4–12		5–12
		1–11		1–11		1–7
		1–9		1–6		1–6
		1–7				
		1–6				
Enforcement	35/3	1–15	35/3	1–15	39/0	1–15
		7–14		7–14		7–14
		5–13		5–13		5–13
		10–12		17–12		22–12
		10–11		3–11		2–11
		1–9		1–9		1–7
		1–7		1–7		
Initiative s & Training	9/2	1–15	10/1	1–15	10/7	1–15
		2–14		2–14		2–14
		1–13		2–13		2–13
		4–12		3–12		3–12
		1–7		1–9		1–11
				1–7		1–7

Office	Fiscal year					
	1998—as of 4/15/98		1999—as of 4/5/99		2000—as of 4/5/00	
	No. of positions/ vacancies	Grade levels	No. of positions/ vacancies	Grade levels	No. of positions/ vacancies	Grade levels
Planning & Analysis	14/2	2–15	14/2	2–15	14/0	2–15
		1–14		1–14		1–14
		5–13		5–13		6–13
		4–12		4–12		3–12
		1–7		1–7		1–7
		1–6		1–6		1–6
Totals	117/12		117/12		122 [1]/10	

[1] Includes 2 positions for student employees working part time.

INFORMATION SYSTEMS

Question. Is intrastate incident data now being reflected in your hazardous materials information system analyses? If so, what is the value of this information and how is it being disseminated to the states and local governments that might benefit from this resource?

Answer. RSPA has received an increased number of reports concerning intrastate shipments—2,512 in 1999, compared with 2,031 in 1997. We expect this number to continue to grow as more intrastate carriers become aware of the reporting requirement.

The addition of intrastate incident data will enhance RSPA's ability to increase safety. We expect that the new reports may reveal risks specific to intrastate hazardous materials shipments. These new data will be used to design new outreach, enforcement, and rulemaking activities.

State and local government agencies have several alternatives in accessing RSPA's hazardous materials incident data. Those agencies can request data directly from RSPA. In 1999, 51 state and local government agencies requested incident data from RSPA, compared to 20 agencies in 1998. They can also establish accounts with RSPA, and access the incident data directly. Currently, 63 state and local government agencies (from 27 different states) have direct access to the HMIS. Lastly, state and local government agencies can access summarized incident data through the Hazmat Web page on the Internet. These data are updated monthly and are available to all Internet users.

RESEARCH AND ANALYSIS

Question. What was accomplished with the additional funds provided in fiscal year 1999 for research to address regulatory issues involving propane gas services?

Answer. In support of a negotiated rulemaking (HM–225A), RSPA contracted with the Volpe Center to provide technical assistance to the Office of Hazardous Materials Safety (OHMS) during the development of new regulations governing the transportation and unloading of liquefied compressed gases. This support addressed issues related to automatic controls that minimize product discharge during hose rupture of MC 330 and MC 331 vehicles (HM–225A). A computer model was developed to determine whether pressure or flow sensing devices installed to detect hose failure would always detect significant changes in pressure or flow rate due to a hose failure. Results were documented in a report entitled "Analyses Investigating Hose/Pipe Shear Failures on Propane Bob-Tail Delivery Trucks". In addition, Volpe provided general technical assistance during the negotiated rulemaking process. The Argonne National Laboratory and the University of Illinois also applied the HMIS database to model cargo tank motor vehicle accident scenarios and to estimate average fatalities and injuries associated with the transportation of liquified compressed gases over extended periods of time using computer simulations. This work was a key component to risk analyses performed by RSPA in support of the rulemaking.

RSPA is continuing to work with the Volpe Center, and the regulated industry to monitor the development and testing of emergency discharge control technology during the two-year implementation period authorized in the final rule issued under HM–225A.

INSPECTION AND ENFORCEMENT PROGRAM

Question. What has RSPA done, in conjunction with Federal Motor Carrier Safety Administration, to develop an electronic intrastate database to determine the effec-

tiveness and impacts of HM–200? What is RSPA's technical and financial involvement? What is the status of that project? Are funds requested for that activity in fiscal year 2001? What is the status of this intrastate database?

Answer. We have worked with FMCSA as it develops an intrastate database intended to support an enforcement strategy and to determine the effectiveness of HM–200 in contributing to a reduction in highway-related incidents involving the intrastate transportation of hazardous materials. RSPA staff have participated in meetings addressing the planning of the new database to ensure cross- compatibility with other hazardous materials data sources. RSPA has not provided funds for this effort and is not requesting funding for the project in fiscal year 2001.

Question. Please calculate the average settlement percentage [amount of civil penalties collected for valid claims divided by the amount of civil penalties originally assessed for valid claims] for those hazmat cases. Please provide data comparable to those provided last year.

Answer:

	1997 [1]	1998 [1]	1999 [1]
Penalties Proposed	$1,613,295	$2,053,196	$2,152,534
Penalties Collected	$1,167,154	$1,412,593	$1,512,323
Percentage Collected	72	69	70

[1] Does not include tickets.

	1997	1998	1999
Ticket Proposed	$183,075	$301,343	$342,204
Penalties Ticket Collected	$179,925	$300,602	$340,897
Penalties Percentage Collected	98	99.8	99.6

Question. Please discuss improvements in your training and outreach program since last year. How were the new positions that were approved last year used? How will they be used in the future? With the new positions that were just approved, why is it necessary to contract for part-time staff support for each of the five regional offices?

Answer. In fiscal year 1999 RSPA enhanced its training and outreach efforts by partnering with state drivers license issuing offices to promote compliance by providing informational materials and technical assistance. We also increased cooperative efforts with State Emergency Response Commissions and Local Emergency Planning Committees, the primary beneficiaries of the HMEP grants program, and developed multi-modal information packages and field compliance guides to educate entities on areas of high risk and noncompliance. We increased industry awareness of human error as a major cause of incidents.

RSPA is currently advertising to fill the new fiscal year 2000 technical assistance positions. RSPA will target high visibility activities aimed toward industry, labor unions and employee organizations and associations through partnering to develop training materials and aids. RSPA will specifically target hazmat operations through national and local industry associations. Our broad based approach will assure the widest possible coverage of this critical information. Over 50 percent of the new materials developed will be targeted at areas of noncompliance, high risk, and new regulatory requirements.

The new positions in each regional office are targeted for specific training and technical assistance activities and will not replace the support staff necessary to provide continuing administrative and clerical support to the offices.

Question. Please present data on the number of times that each of your inspectors working in the regional offices conducted joint inspections or provided training for state officials.

Answer. In 1999, RSPA hazardous materials inspectors conducted 57 inspections with state agencies, some of which were joint inspections with other Federal inspectors and/or included training of state inspectors. RSPA also made 21 presentations to state agencies, some of which included inspector training, and held nine meetings with state inspectors on enforcement issues.

SAFE FOOD TRANSPORTATION

Question. What did OHMS do since last year to implement any aspect of the SFTA?

Answer. RSPA conducted limited monitoring of United States Department of Agriculture (USDA) and Food and Drug Administration (FDA) activities and consulted with USDA and FDA staff. RSPA provided expertise on hazardous materials and other transportation safety issues in support of USDA and FDA safety activities.

Question. What activities do you anticipate for fiscal year 2001 and for the rest of fiscal year 2000?

Answer. RSPA will continue the limited monitoring and support of United States Department of Agriculture (USDA) and Food and Drug Administration (FDA) activities.

SHIPPER AND CARRIER REGISTRATION

Question. Please display the total registration fees collected for each of the last five fiscal years by the shipper and carrier registration program, broken out by emergency response activities and administrative costs. How much do you expect to collect during fiscal year 2000 and during fiscal year 2001?

Answer.

EMERGENCY PREPAREDNESS FUNDS RECEIPTS

[In millions of dollars]

Registration year	Processing fee receipts	Grants program receipts	Total receipts
1995	$1.426	$6.873	$8.299
1996	1.419	6.910	8.329
1997	1.527	7.372	8.899
1998	1.650	7.970	9.620
1999	1.582	7.635	9.218
2000 (est.)	1.200	14.300	15.500
2001 (est.)	1.200	14.300	15.500

Question. Please describe the shipper and carrier registration program's industry technical assistance and customer assistance program.

Answer. RSPA continues to enhance its support to the regulated community to assist in meeting the registration requirements. RSPA provides materials and detailed instructions on program requirements. We maintain two customer assistance centers to provide direct assistance via telephone. We are now developing an Internet-based registration process, to offer on-line registration with credit card payment capability.

Question. Please outline the registration fee assessment, collection, and grant disbursement cycle.

Answer. In May of each year RSPA mails registration information and application forms to companies that have previously registered and companies whose names have recently been added to the FMCSA motor carrier and shipper census or who have recently been named as a carrier or shipper on a hazardous materials incident report. Between May and September of each year, approximately 85 percent of the companies that will register for the year submit the application and payment. Late in September of each year RSPA makes grant allocations, distributing the funds available to state and Indian tribal governments for their use in the following fiscal year.

Question. In April 1998, the DOT Inspector General published a management advisory on the hazardous materials registration program which found that RSPA does not collect the full amount of potential registration fees. Please discuss your response to the IG report and how its recommendations were implemented. Please submit data indicating the amount collected before and after the IG's recommendations were implemented. How much of the increase from user fees can be attributed to improved registration fee collection that was initiated, in response to the recommendations? Since last year, what new strategies have you tried to increase the amount of collected fees?

Answer. RSPA implemented the IG's recommendations by mailing registration information to companies identified as carriers or shippers of hazardous materials in the Office of Motor Carriers' census of motor carriers and shippers. We also increased the number of follow-up mailings to companies that had registered in the past. These efforts identified approximately 1,000 new registrants and raised an additional $500,000, including collections for prior years. The increased number of registrants has been maintained for the 1999–2000 registration year. On March 22,

1999, the IG determined that our actions were timely and appropriate and reported the recommendations as resolved and closed. We have continued the increased follow-up mailings.

We also amended the registration requirements as recommended by the IG. A final rule establishing a two-tiered registration fee schedule and expanding the requirements to all shippers and carriers of placarded shipments of hazardous materials, with a limited exception for farmers, was published on February 14, 2000, which becomes effective with the 2000–2001 registration year. As a result of these changes, RSPA expects that 45,000 companies will register for the 2000–2001 registration year. As part of the program planned to inform the public of the expanded registration requirement, RSPA plans to mail information packets to approximately 100,000 companies.

RESEARCH AND DEVELOPMENT

Question. What are the major advances that have resulted from your R&D program during each of the last three years? How has this information been reflected in improvements in your program?

Answer. In 1999, RSPA completed a threat assessment of the vulnerabilities of transporting hazardous materials in aircraft cargo compartments in compliance and non-compliance situations, and identified chemicals and substances that pose the greatest hazards in this environment. Key recommendations have been incorporated into the ONE DOT Flagship Initiative on Hazardous Materials /Incidents—a high profile initiative consisting of 6 action areas with 16 specific activities. The activities include: defining and encouraging industry actions and developing rulemaking to increase awareness and compliance with hazardous materials requirements in air transportation, and examining the feasibility of using new non-invasive screening technologies to detect undeclared hazardous materials. RSPA and the FAA are working together to implement these tasks in accordance with established milestones.

The "National Transportation Risk Assessment for Selected Hazardous Materials" is in final draft and is currently undergoing peer review. This multi-year research effort more accurately characterizes the spectrum of risks involved in the transportation of hazardous materials in comparison to historical data. Results of the study will provide a better sense and understanding of hazardous material transportation risk.

In fiscal year 1999, RSPA initiated development of a "Guidance Manual for Explosives Classification" to provide explanatory and advisory information pertaining to all sections of the hazardous materials regulations dealing with classification of new explosive substances and articles. The manual will be used internally and externally as a reference and training document for RSPA employees and explosives laboratories approved by RSPA involved in the examination, recommendation, and technical review of new explosives and articles.

As a result of two severe accidents and a National Transportation Safety Board recommendation, RSPA is completing a multi-phase study on how to increase accident survivability of front heads on MC–331 cargo tank motor vehicles. Results are being used to suggest improvements in design for heads and secondary heads. Prototype designs are slated for manufacture and testing during the final phase of this project, which will be completed in fiscal year 2000. Successful demonstrations will aid RSPA in rulemaking to reduce the risk associated with severe accidents involving MC–330 and MC–331 Cargo Tank Motor Vehicles.

In support of publication of the Year 2000 Emergency Response Guidebook (ERG2000), RSPA sponsored critical research aimed at identifying greater numbers of water-reactive chemicals and applying statistical methodology to predict initial isolation and protective action distances. In addition, research and improved methodologies permitted continued refinement of recommended actions based on spill size as well as updating of initial isolation zones and health criteria.

RSPA initiated research in fiscal year 2000 to develop methods and procedures to implement non-destructive testing (NDT) for DOT specification metallic and composite pressure vessels. The new NDT methods will detect fatigue cracking and stress corrosion cracking as well as wall thinning in a pressure vessel. This reduces environmental impact, potential contamination, out-of-service time, and possibilities of corrosion, compared to older hydrostatic test methods.

To promote and expand the use of risk assessment techniques and risk management approaches, RSPA initiated a study of the applicability of Hazard Analysis and Critical Control Points (HACCP) or similar methodologies to the transportation of hazardous materials. We anticipate this research will lead to voluntary "best-

practices" or guidelines for understanding and managing risks by all the parties involved in hazardous materials transportation.

Research related to regulatory issues involving propane and other liquified compressed gases are addressed under a separate question.

The enforcement program has conducted an aggressive package testing program, targeting packages which it believes do not comply with UN standards and thus present a risk to public safety. Through enforcement, interaction with manufacturers, and dialogue with industry, RSPA believes that it is enhancing the safety of UN performance-oriented packaging standards used in the transportation of hazardous materials.

A report entitled, "Exploration of GPS to Enhance the Safe Transport of Hazardous Materials," was completed in fiscal year 1998 and provided information on using GPS as a safety tool to aid emergency response to hazmat incidents. While current deployment was seen as practical on a company-by-company basis, federally mandated installment or publicly deployed facilities were not.

"Identification of Factors For Selecting Modes and Routes For Shipping High-Level Radioactive Waste and Spent Nuclear Fuel," was also published in fiscal year 1998. Its compilation of risk data and industry transport practices improved our risk management and industry knowledge.

In fiscal year 1999, consistent with a TRB recommendation that the Department periodically examine information technology's potential to improve hazmat incident management, we completed an assessment of current technology deployment within the emergency response community to support efforts at facilitating safer, more efficient emergency response. A report detailing the results of that research, "Information Technology and Emergency Response: Current Applications" will be published in fiscal year 2000.

An examination of the flows of US international hazmat traffic was also undertaken in fiscal year 1999 with a report published in fiscal year 2000 entitled, "Hazardous Materials in U.S. Foreign Trade." This research has identified potential risks in these particular hazmat markets.

A study of the operating practices, traffic volumes and modal shares of diagnostic specimens processed in the U.S. is scheduled to be completed in fiscal year 2000. Findings from this effort will help evaluate proposed regulations affecting the safe transport of infectious diagnostic substances from hospitals, clinics, and other health industry establishments to laboratory facilities that test the specimens.

RESEARCH AND TECHNOLOGY STRATEGIC GOALS

Question. What has RSPA done since last year to implement the provision of TEA–21 that requires strategic planning to design a national surface transportation research and technology agenda? What is the effectiveness and value of these efforts? What impacts have recent federal and DOT strategic planning efforts for surface transportation research and technology had on decisions about cross-cutting and modal research projects and how they are performed?

Answer. In May 1999 the Secretary and the President's Science Advisor jointly announced the Department's first Transportation Research and Development Plan. This document was developed in part to respond to a requirement in Section 5108 of TEA–21. It was developed through an interagency strategic planning process, focused in DOT by the Department's Research and Technology Coordinating Council.

On an interagency basis, the President's National Science and Technology Council establishes overall directions and priorities for transportation research through documents like its National Transportation Science and Technology Strategy and related implementation plans. Within the Department, the DOT R&D Plan then links conduct of such important R&T to the achievement of DOT's overall Strategic Goals. The DOT R&D Plan has quickly become a resource used by DOT's modal R&T planners in developing their own programs and budgets. This process has been used again to generate an updated DOT Transportation R&D Plan (second edition), which is undergoing final DOT reviews.

The second edition of the DOT Transportation R&D Plan (1) has a five year and longer time horizon for the partnerships, research, education, and technology transfer activities it discusses; (2) includes extensive and detailed coverage of DOT modal programs, developed with their involvement; and (3) includes a full chapter developed with AASHTO on state transportation research initiatives. Its safety elements have been the subject of a recent National Research Council/Transportation Research Board panel review which focused on DOT research that supports its safety goal. We expect the panel's findings in May 2000. This and subsequent texts are to be provided to the Congress as supplements to the Department's R&D budget requests. Most importantly, the text specifically links R&D priorities—emphasis

areas—to accomplishment of DOT Strategic goals. As a result, research activities have become more focused and are more definitively linked to desired outcomes.

The process has been accepted well by the various DOT participants. In fact, based on their view of the effectiveness of the process, the Federal Aviation Administration is modeling the approach they are taking to develop their next five-year research plan on that used for the DOT Transportation R&D Plan.

The process of preparing the Plan, in conjunction with the directions provided each year by OMB/OSTP Interagency R&D Priorities guidance, and the NSTC interagency process, has heightened awareness of related activities and promoted collaborative research efforts on an intermodal and interagency basis. These efforts include: (1) National Highway Research and Technology Partnership Initiative; (2) Intelligent Vehicle Initiative; (3) the NHTSA Advanced Technology Program; (4) the Interagency Initiative on Marine Fuel Cells; (5) the DOT initiative on human-centered systems; (6) the Advanced Vehicle Technologies Program; (7) the Commercial Remote Sensing Program; (8) the Transportation Infrastructure Assurance R&D Program; and (9) University Marine Transportation Grants Program. In the longer term, an initiative on nanotechnology applications is under discussion.

Question. Please list by contract and amount how comparable funds provided in fiscal year 1999 and in fiscal year 2000 under the activity R&D Planning and Management were used or will be used.

Answer. RSPA obligated and plans to obligate funds for activities under R&D Planning and Management as follows:

Activity	Fiscal year	
	1999	2000
Strategic Planning:		
S&T Strategy	$50,000	.....
Peer/Merit Review	150,000	$200,000
Transportation Technology Plan	100,000	100,000
Private-public Partnership Outreach	350,000	175,000
Strategic Research Plan	100,000	100,000
Enabling Research Outreach	150,000	100,000
DOT R&D Plan	150,000	150,000
International S&T Assessments	100,000	100,000
Sustainability	100,000	100,000
Subtotal	1,250,000	1,050,000
Research and Technology Coordination and Facilitation:		
Performance Measurement	50,000	50,000
Innovation Partnerships	50,000	50,000
National Research Council (GUIRR)	125,000	125,000
TRB Annual Fee	50,000	50,000
International S&T (e.g., NAFTA,US-EU)	150,000	150,000
DOT R&D Tracking System	100,000	200,000
DOT Technology Sharing/Transfer	100,000	100,000
Homepages	210,000	210,000
Subtotal	835,000	955,000
Intermodal and multimodal Research and Education: Small Business Innovative Research	150,000	100,000
Total	2,235,000	2,105,000

Question. Please list by contract and amount how similar funds requested for fiscal year 2001 will be used, being certain to list for each topic specified on pages 119–124 its associated funding amount.

Answer. RSPA plans to obligate funds for activities under R&D Planning and Management in fiscal year 2001 as follows:

Activity	*Fiscal year 2001*
Strategic Planning:	
Strategy	$200,000
Peer/Merit Review	200,000
Transportation Technology Plan	100,000
Private-public Partnership Outreach	180,000
Strategic Research Plan	100,000
Enabling Research Outreach	100,000
DOT R&D Plan	150,000
International S&T Assessments	100,000
Sustainability	100,000
Subtotal	1,230,000
Research and Technology Coordination and Facilitation:	
Performance Measurement	50,000
Innovation Partnerships	50,000
National Research Council (GUIRR)	135,000
TRB Annual Fee	60,000
International S&T (e.g., NAFTA,US-EU)	100,000
DOT R&D Tracking System	200,000
DOT Technology Sharing/Transfer	100,000
Homepages	210,000
Subtotal	905,000
Intermodal and multimodal Research and Education: Small Business Innovative Research	100,000
Total	2,235,000

Question. Please break out separately funding for any conferences, meetings, outreach activities, international scanning activities, or panel discussions sponsored by RSPA using funds appropriated under the research and technology subaccount for fiscal years 1999 and 2000.

Answer. RSPA obligated and plans to obligate funds to support conferences, meetings, outreach, international scanning activities, and panel discussions as follows:

	Fiscal year	
	1999	2000
National Research Council/Transportation Research Board Workshops	$100,000	$150,000
Public-private Partnerships and Enabling Research Outreach	450,000	250,000
Civil Engineering Research Foundation Workshops	50,000	50,000
International Scanning	100,000	100,000
Total	700,000	550,000

Question. Please give specific examples of key needs in cross- cutting or intermodal research that you plan to fund in fiscal year 2001. Could a portion of the human-centered systems operator fatigue management research proposed for fiscal year 2001 be conducted under this subaccount?

Answer. There are several key areas in which we plan to engage in cross-cutting or intermodal research:

—Human-centered systems
—Transportation infrastructure assurance, including aviation safety/security
—Advanced vehicle technologies
—Marine fuel cells (Small Business Innovation Research (SBIR) Support)
—University Transportation Research and Marine Transportation Research

RSPA does not use the R&D planning and management funds for direct research, other than SBIR. Direct R&D can be found in separate line items within our budget.

Each of the cross-cutting areas above has been underscored as national research priorities in several interagency documents, including the NSTC National Transportation Science and Technology Strategy, Transportation Technology Plan, and Transportation Strategic Research Plan.

The operator fatigue management activities are a subset of the human-centered systems research program. The human-centered systems research program is a critical part of the Department's cross-cutting research agenda. The results of that research agenda serve as a multimodal base of knowledge from which all DOT administrations will be able to profit in reducing loss of life and property from transportation incidents.

Meeting the objectives of all of these research initiatives will require all the resources requested for these activities in the fiscal year 2001 budget request. This work will be critical to the Department's ability to support transportation goals of safety, mobility and security, while contributing to the reduction of adverse, transportation-related environmental impacts.

Question. Did RSPA or OST obtain any funding in either fiscal year 1999 or 2000 from FHWA's surface transportation research and development account for any purpose? If so, please specify the use and amount of any funding received.

Answer. The FHWA provided funding to RSPA to support the implementation of Section 5108 of the Transportation Equity Act for the 21st Century. Specifically, FHWA provided $200,000 in fiscal year 1999 and $250,000 in fiscal year 2000 to help accomplish the following:

(1) Develop the second and third edition of the DOT R&D Plan ($200,000);

(2) Conduct a National Research Council review of the DOT R&D Plan and transportation R&D strategic planning process ($150,000); and

(3) Support the development of Performance Plans and Performance Reports ($100,000).

Question. Please provide an explanation of how funds requested for administrative expenses are used.

Answer. We plan to use funds requested for administrative expenses as shown below:

Administrative Expenses	*Fiscal year 2001 (Estimated Obligations)*
Training	$8,000
Printing	59,000
Supplies & Materials	9,000
Equipment	17,000
Travel	15,000
Total	108,000

Question. Please list each of the recommendations of the TRB committee that reviews your work and RSPA's response.

Answer. The National Research Council/Transportation Research Board Committee on the Federal Transportation R&D Strategic Planning Process has conducted five major reviews to date of the Federal transportation R&D strategic planning process for the National Science and Technology Council Committee on Technology and its Subcommittee on Transportation R&D. Each has been documented in a separate letter report. Four have focused on interagency issues:

—The Strategic Planning Process itself (9/97)

—Technology Partnerships (9/98)

—Enabling Research (11/98)

—The Partnership for Infrastructure Renewal in Transportation, and Medium-/Heavy-duty Vehicle Research (9/99)

The fifth review is the first to focus specifically on DOT programs, in this case those supporting the DOT Strategic Goal of enhancing Safety. The letter report from that review is attached for your information.

The recommendations from the studies to date have been used to focus process improvements. For example, the first interagency review recommended integrating top-down and bottom-up planning, establishing research priorities, recognizing directions in non-Federally funded research, using the iterative nature of the planning process to refine directions, linking research plans with an end-state vision, and linking R&D planning with budget guidance. The new DOT R&D Plan, now in final preparation, reflects many of these guidelines. DOT will continue to incorporate insights from the reviews as research planning continues.

NATIONAL ACADEMY OF SCIENCES,
Washington, DC, March 28, 2000.

The Honorable RODNEY E. SLATER,
Secretary of Transportation,
U.S. Department of Transportation, Washington, DC.

DEAR MR. SLATER: At the request of Dr. Fenton Carey, Chairman of the Research and Technology Coordination Council of the U.S. Department of Transportation (DOT), the National Research Council (NRC), acting through the Transportation Research Board (TRB), convened the Committee for Review of the National Transportation Science and Technology Strategy (see Attachment 1 for a list of the committee members). The committee is charged with fulfilling the congressional request in the Transportation Equity Act for the 21st Century (TEA–21) to review and comment on DOT's Strategic Plan, Performance Plan, and Program Performance Report (required under the Government Performance and Results Act [GPRA]) with respect to surface transportation research and technology (R&T) development.

While Congress specified "surface transportation research and technology development" in its request, DOT asked that all modes be included in the committee's task; thus the committee has not limited its scope to surface transportation. Moreover, although many of the issues and questions addressed by the committee apply to the above documents in a general way, in some cases it was necessary to perform a more focused analysis of specific strategic goals and how R&T supports them. In particular, at the request of DOT staff, the committee performed such a focused analysis on the safety goal. The selection of safety as a focus area reflects this goal's high level of importance to society and to the Department. At the same time, the committee believes that its observations on the safety elements of the documents are valid for the other goal areas as well since DOT has applied the same structure and process for all of its strategic goals.

The committee carried out its task by reviewing DOT's GPRA documents and the first edition of the Department's Research and Development Plan (R&D Plan), dated May 1999, as well as by holding a meeting in Washington, D.C., on February 3–4, 2000. During the open session of the meeting, the committee heard from Eugene Conti (Assistant Secretary for Transportation Policy, DOT) and Fenton Carey (Associate Administrator for Research, Technology and Analysis, DOT Research and Special Programs Administration [RSPA]) about the Department's strategic planning efforts and how its R&T activities support the achievement of its strategic goals. In addition, brief presentations were made by research managers from several DOT operating administrations.

BACKGROUND

Transportation makes essential contributions to the nation's economy and quality of life. New knowledge and innovative technologies derived from research have played a critical role in supporting and enhancing those contributions, and in helping to mitigate some of transportation's less desirable impacts with regard to safety and the environment. Now more than ever, R&T offers promise for enhancing the performance of the transportation system. However, resources for research are limited. Strategic planning and analysis are required to direct these resources to their most beneficial uses.

During the last several years, DOT has made considerable progress in developing a strategic planning process for transportation R&T at the levels of both the Department and the federal government. Coordinating bodies at both levels—DOT's Research and Technology Coordinating Council (RTCC) and the National Science and Technology Council's (NSTC) Subcommittee on Transportation R&D, respectively—have been established or reinvigorated. Several partnership initiatives, involving federal agencies, the private sector, and state and local governments, have been undertaken to advance research in promising areas. Support for the role of R&T in enhancing transportation has been exhibited consistently at the highest level of the Department. It is the committee's hope that in the years to come, the strategic value of R&T will continue to be accorded significant visibility, backed by adequate institutional authority within the Office of the Secretary.

This NRC committee—which has undergone a number of transformations since TRB coordinated the DOT-sponsored Forum on Transportation R&D in 1995—has been privileged to participate in and witness the progress made to date. From 1997 through 1999, the committee reviewed elements of the NSTC's strategic planning process, and that effort will continue. The committee's new task—focusing on DOT's use of R&T to support its Strategic Plan—well complements the NSTC review. The two tasks promise to be mutually reinforcing in a way that should enhance the quality and usefulness of both reviews.

The remainder of this report contains the results of the committee's review of DOT's GPRA documents and R&D Plan. It begins with general observations regarding GPRA, research, and DOT's efforts to present its R&T program within the GPRA framework. This is followed by a description of the approach used by the committee to conduct its review. The committee's recommendations are then presented, arranged according to major topics relevant to research management. Attachment 2 contains the committee's more detailed findings, arranged according to the questions that guided its review.

GENERAL OBSERVATIONS

Since GPRA was passed in 1993, some questions have been raised about its applicability to the research activities of government agencies. Because the process required by GPRA is based on a 5-year strategic planning horizon, concern exists within the committee that GPRA constrains, and perhaps prohibits, the long-term thinking and planning that should characterize the federal role in research. This concern is particularly relevant for basic research, but even successes from highly applied research (the type sponsored by DOT) can require years before achieving widespread implementation. Nevertheless, the committee believes that if issues related to GPRA's short planning horizon are overcome, the requirement to align activities with strategic goals and to apply some form of performance measurement is entirely appropriate for R&T and a salutary discipline for agencies entrusted with the public good.[1]

The fact that R&T is an overarching corporate management strategy for DOT represents a strategic decision or policy to use R&T to advance the Department's goals. The documents reviewed by the committee comprise DOT's initial attempt to plan and portray its R&T activities under GPRA. Summarizing and presenting a large quantity of information about very diverse activities in a succinct way is a difficult task. There is a risk of oversimplifying a highly complex activity—transportation research—in trying to facilitate the reader's assimilation of the vast array of R&T that can contribute to the system's improved performance. Overall, the Department has made a commendable effort to accomplish this task. The main flaw of the current R&D Plan is that it does not fully articulate DOT's many important R&T activities and how they serve attainment of the Department's strategic goals. The committee understands that improvements are already being made in this regard for the next version of the R&D Plan.

REVIEW APPROACH

As noted earlier, the congressional request that gave rise to this review requires that the NRC examine DOT's GPRA documents "with respect to surface transportation research and technology development" (TEA–21, Section 5108 "§ 508(c)(3)"). The committee reviewed the following specific GPRA documents:

—U.S. Department of Transportation Strategic Plan 1997–2002
—U.S. Department of Transportation 1999 Performance Plan
—U.S. Department of Transportation 2000 Performance Plan
—U.S. Department of Transportation 2001 Performance Plan and 1999 Performance Report

In addition, TEA–21 (Section 5108 "§ 508(c)(1)") requires DOT to develop an "integrated surface transportation research and technology development strategic plan." Since this document—the R&D Plan (first edition, May 1999)—is intended to present more detail about the role of R&T in meeting DOT's strategic goals, it was included in the committee's review as well

To perform its review, the committee began by assessing the R&D Plan with regard to the contents required by TEA–21 (Section 5108 "§ 508(c)(2)"). In addition, the committee posed several questions based on the required contents of GPRA documents. Both the TEA–21 requirements and these additional questions are used to structure the committee's more detailed findings in Attachment 2.

KEY RECOMMENDATIONS

The committee believes the R&D Plan should articulate explicit R&T priorities, the methodology used to determine those priorities, and how each priority is reflected in the Department's budget. The committee formulated two key rec-

[1] For more detailed treatment of the importance of evaluating research activities and the need to use appropriate measures of performance for different types of research, see Evaluating Federal Research Programs: Research and the Government Performance and Results Act, Committee on Science, Engineering, and Public Policy, National Academy Press, Washington, D.C., 1999.

ommendations for improving the R&D Plan, as well as the other documents reviewed, in this regard.

Recommendation 1: Alignment of R&T with Strategic Plan

R&T priorities and activities should be tied more explicitly to the Department's strategic and performance goals,[2] and their relationship to these goals should be articulated more clearly.

The overall strategy of the Department with respect to R&T mirrors the NSTC strategy, the main elements of which are strategic planning, partnership initiatives, enabling research, and training and education. It is not always clear from the GPRA documents, or the R&D Plan, however, exactly how R&T supports the Department's strategic goals. R&T activities—those listed in the GPRA documents as well as the partnership initiatives and enabling research in the R&D Plan—should be tied clearly to the Department's strategic goals through articulation of their relationship to the performance goals associated with each strategic goal. While it may not be appropriate for the Strategic Plan or the Performance Plans to include such explanations, it would be appropriate for the R&D Plan to do so.

The R&D Plan should be organized primarily in accordance with DOT strategic and performance goals, rather than the partnership initiatives and enabling research of NSTC. However, the committee supports the use of the NSTC categories as a way of reflecting the overall R&T corporate management strategy and demonstrating that DOT's R&T activities are consistent with the multidepartment cooperative perspective of the NSTC framework.

R&T is often many steps removed from the outcome goals in the Strategic Plan, and the GPRA documents cover so many DOT activities that they cannot provide detailed rationales for specific R&T activities. The R&D Plan should show how the R&T activities are driven (directly or indirectly, in the short or the long term) by the goals of the Strategic Plan.

Recommendation 2: Resources

The R&D Plan should include the funding budgeted for specific R&T activities and performance goals, since budgets are a tangible reflection of the real priorities of an agency.

The R&D Plan contains no discussion of resource needs for R&T. Funding devoted to specific R&T activities and performance goals should be specified so the level of R&T effort toward each goal can be ascertained. As mentioned in Recommendation 4, below, funding should also be characterized according to the types of R&T activities so that the mission focus of DOT will be more apparent from its R&T investments.

Funding is not the only resource need. Human capital is just as critical, particularly in the area of R&T. It is necessary to have people who can discover new knowledge and develop and use new technologies. The R&D Plan does not address the human resource needs of DOT to support specific R&T efforts. Without the proper knowledge base within DOT and its partner organizations, the promise of R&T will not be realized.

OTHER RECOMMENDATIONS

In addition to the key recommendations presented above, the committee formulated the following more specific recommendations.

Recommendation 3: Criteria and Methodologies for Program Development

DOT should employ rational criteria and methodologies in prioritizing and budgeting for its R&T programs and should include these criteria and methods in the R&D Plan.

The documents reviewed do not indicate what criteria and systematic methodologies, if any, were used in determining the R&T activities to be carried out by the Department. Alignment with strategic goals is necessary, but not sufficient, since it is possible to identify many more activities that are related to the goals than can be undertaken with the limited resources available. As recommended in the committee's previous letter report of September 3, 1999, the practices of technology scan-

[2] DOT's Strategic Plan contains five "strategic goals." Each of these goals is further broken down into "performance goals," which reflect the specific ways in which the operating administrations will contribute to the strategic goals. The Department's annual Performance Plans and Performance Reports are focused primarily on the performance goals, which may evolve over time as they are met or as other ways to achieve the strategic goals are deemed more effective. Attachment 3 lists the strategic and performance goals for safety, taken from DOT's fiscal year 2000 Performance Plan.

ning[3] and technology mapping[4] are useful initial R&T activities. In addition, in the safety area in particular, risk analysis based on careful analysis of statistical data can help identify the most promising approaches.

Various criteria and methods can be used to prioritize R&T activities. The committee would like to suggest that in preparing future versions of the R&D Plan, DOT consider adopting a methodology such as that presented by the Federal Railroad Administration (FRA) during the committee's meeting. A description and diagram depicting FRA's methodology are presented in Attachment 4. While the method was developed specifically to prioritize rail safety R&D, it is a good example of a rational approach that could be adapted to broader research prioritization efforts. The practice of focused and transparent priority setting would help increase the credibility of DOT's R&T programs by ensuring responsible and competent use of the public funds entrusted to the Department.

Recommendation 4: Types of R&T Activities Undertaken

The documents should clearly explain DOT's role in transportation R&T by identifying where its R&T activities are most appropriately focused and demonstrating that its investments are, in fact, in areas not likely to be covered by other agencies or the private sector.

The documents express a greater emphasis on "technology" than on "research." For instance, the Research and Development Corporate Management Strategy of the 1999 Performance Plan was revised for the 2000 Performance Plan. Language referring directly to alignment and harnessing of research and to building of intellectual capital was deleted. At the same time, language focused on innovation—"capacity to transform new technologies, concepts, and ideas rapidly into new products, processes and services . . ."—was added (see pages 5–6 of the revisions to the final DOT fiscal year 2000 Performance Plan). Since DOT's specific role in transportation R&T is not explained in the documents, the reason for placing more emphasis on innovation than on research is unclear.

It might be helpful, as the Department of Defense has done, to employ a taxonomy for distinguishing longer-term or more advanced research, shorter-term applied research, development, testing and evaluation, and implementation support. Then DOT could articulate which portions of the R&T spectrum are most clearly associated with its role and indicate its level of investment in each, taking into consideration possible variations among the operating administrations, in this regard. The issue of agency roles and missions is addressed further under Recommendation 5 below.

Recommendation 5: Public-Sector Organizational Roles and Coordination

The roles of various public-sector participants (other federal agencies, DOT operating administrations, state and local governments) and the mechanisms for coordinating their participation should be described in the R&D Plan. The R&T activities DOT has chosen to pursue should reflect these coordination efforts.

Although required in TEA–21, there is no general discussion in the R&D Plan of the missions of the various federal departments and agencies, their (presumably) complementary responsibilities, the consequent differences in their roles in R&T, and the potential for interaction and synergy. For instance, in 1997, approximately $5.1 billion[5] was invested by federal agencies in transportation-related R&D, of which DOT accounted for about 8 percent. The R&D Plan should explain how DOT's efforts fit with those of other agencies; which agencies, given their missions, focus more on specific portions of the R&T spectrum; and what is provided by DOT efforts that is not covered by the other agencies.

The R&D Plan also contains no overall discussion of the roles of each operating administration within DOT over the next 5 years, as required by TEA–21. For instance, given that 94 percent of fatalities in transportation are highway-related, it would be appropriate to point out the primary role of particular operating administrations (Federal Highway Administration [FHWA], National Highway Traffic Safety Administration [NHTSA], and Federal Motor Carrier Safety Administration [FMCSA]; and FRA in the case of crashes involving highway-rail grade crossings) in reducing transportation fatalities.

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[3] Technology scanning is a review of research in a variety of areas that could be applied to a subject of interest.

[4] Technology mapping is a careful analysis that indicates those points in specific systems that offer the highest leveraging potential so the research to be undertaken can be directed toward critical problems.

[5] National Science and Technology Council, Transportation Strategic Research Plan, Washington, D.C., May 1999.

There is also no discussion of state and local R&T activities in the plan. In particular, there is no acknowledgment of the role of these agencies as owners and operators of important parts of the transportation system and as major investors in research, and therefore as critical partners in the prioritization and conduct of research and the development and implementation of new technologies.

Regarding coordination, the R&D Plan refers to the RTCC at the DOT-wide level, and to the NSTC Subcommittee on Transportation R&D and its strategic planning documents at the federal government-wide level. The committee applauds the RTCC and DOT's interaction with the NSTC subcommittee; clearly, however, coordination does not take place through the mere existence of committees and documents, but through their impacts on priorities, budgets, and activities. The connection between the committees and the operational realities of DOT's R&T programs is not evident.

Recommendation 6: Outreach

The R&D Plan should be developed with input from the public, private, and academic sectors. The methods of obtaining this input and results of the outreach should be documented in the plan itself.

TEA–21 requires that DOT obtain comments on the R&D Plan from outside sources and include responses to significant comments in the plan itself. While comments from this NRC committee could not be included since the committee first met after the initial version of the R&D Plan had been published, it is not evident from the plan that DOT solicited any comments from outside sources. Even though significant outreach may not have been possible for this version of the plan, the plan could have described the nature and extent of outreach to be conducted for future editions. The plan would benefit from the input of stakeholders in the public, private, and academic sectors.

Recommendation 7: Performance Measurement

Performance measurement of DOT's R&T activities should extend beyond theoretical discussion. Specific measures, methods of applying them and analyzing the results, and the actions to be taken in response should be specified in the R&D Plan.

Chapter V of the R&D Plan, "Measuring Success," provides a general discussion of GPRA and performance measurement, but does not indicate how the general theory has been applied to DOT's R&T programs. A list of impact-based performance measures is included in Table V–2, but these differ from the performance goals and indicators in the Department's Strategic Plan and Performance Plans. Since R&T activities are often far removed in time and in the chain of causality from the ultimate outcomes expressed in DOT's strategic goals, it may be necessary to establish intermediate goals for R&T activities. It should be made clear, however, how achievement of these intermediate goals will bring the Department closer to achievement of its ultimate goals.

The Strategic Plan indicates that the Department will measure the impact of R&T on transportation system performance through benchmarking efforts. However, this activity is not mentioned in the Performance Plans. Instead, benchmarking efforts aimed at measuring the performance of DOT R&T facilities are proposed. It is not clear that an assessment of R&T facilities will serve as an assessment of R&T results.

CONCLUDING REMARKS

These recommendations focus on a small number of the important issues surrounding the implementation of GPRA to research and technology activities. In future years, the committee may choose to address other issues, such as human resource requirements and the need to balance planning and flexibility.

The committee is pleased to have had the opportunity to provide feedback on DOT's efforts to use R&T to advance national transportation goals, and hopes that its comments and recommendations will prove useful. The committee looks forward to continued participation in the Department's strategic planning efforts.

Sincerely,

JOSEPH SUSSMAN,
Chair, Committee for Review of the National Transportation Science and Technology Strategy.

ATTACHMENT 1

COMMITTEE FOR REVIEW OF THE NATIONAL TRANSPORTATION SCIENCE AND TECHNOLOGY STRATEGY

Joseph M. Sussman, Chairman, Japan Rail East Professor and Professor of Civil and Environmental Engineering and Engineering Systems, Massachusetts Institute of Technology (MIT), and Director of MIT's Association of American Railroads Affiliated Laboratory.

H. Norman Abramson [NAE], Vice Chairman, Executive Vice President (retired), Southwest Research Institute.

A. Ray Chamberlain, Vice President and Area Manager, Parsons Brinckerhoff.

Irwin Feller, Director and Professor of Economics, Pennsylvania State University Institute for Policy Research and Evaluation.

Robert E. Gallamore, Assistant Vice President, Communications Technologies and General Manager of the Positive Train Control Program, Transportation Technology Center, Inc.

William C. Harris, President and Executive Director, Columbia University's Biosphere 2 Center.

Christopher T. Hill, Vice Provost for Research and Professor of Public Policy, George Mason University.

Margaret T. Jenny, Vice President, Corporate Business Development, ARINC.

C. Ian MacGillivray, Director, Engineering Division, Iowa Department of Transportation.

Sue McNeil, Braun/Intertec Visiting Professor, University of Minnesota.

Steve T. Scalzo, Senior Vice President, Operations, Foss Maritime Company.

Dale F. Stein [NAE], President Emeritus, Michigan Technological University.

Michael S. Townes, Executive Director, Transportation District Commission of Hampton Roads.

ATTACHMENT 2

DETAILED ASSESSMENT OF DOCUMENTS

Questions Guiding Assessment

To conduct its review, the committee began by assessing the R&D Plan with regard to the contents required for this plan in TEA–21 (Section 5108 "§ 508(c)(2)"). These required elements are as follows:

(A) an identification of the general goals and objectives of the Department for surface transportation research and technology development;

(B) a description of the roles of the Department and other Federal agencies in achieving the goals identified under subparagraph (A), in order to avoid unnecessary duplication of effort;

(C) a description of the overall strategy of the Department, and the role of each of the operating administrations of the Department, in carrying out the plan over the next 5 years, including a description of procedures for coordination of the efforts of the operating administrations of the Department and other Federal agencies;

(D) an assessment of how State and local research and technology development activities are contributing to the achievement of the goals identified under subparagraph (A);

(E) details of the surface transportation research and technology development programs of the Department, including performance goals, resources needed to achieve those goals, and performance indicators as described in [GPRA—see Tab 1, Section 1115(a)], for the next 5 years for each area of research and technology development;

(F) significant comments on the plan obtained from outside sources; and

(G) responses to significant comments obtained from the National Research Council and other advisory bodies, and a description of any corrective actions taken pursuant to such comments.

The committee also developed additional questions derived from the requirements found in GPRA. These questions are as follows:

(1) Do the Strategic Plan and Performance Plans include R&T as contributors to achieving strategic goals?

(2) If so, is the R&T related to the goals and is the relationship clearly explained in the documents?

(3) Does the Performance Report or the R&D Plan include: (a) A summary of results of previous fiscal years' R&T? (b) An analysis of the relationship between R&T results and DOT's strategic goals? (c) A description of the methodology used for assessing results? (d) A description of significant changes in the R&T undertaken com-

pared with what was included in that year's plan (planned R&T that was not performed and why, unplanned R&T that was performed and why)?

(4) How are the following processes handled: (a) Gathering input from stakeholders and incorporating it into the plan and report; (b) Mechanisms for coordination and cooperation among public and/or private entities; and (c) Tracking of progress on R&T activities.

Detailed findings

The committee's detailed findings based on the TEA–21 requirements and the additional questions listed on the previous page are in italics below.

Conformity of the R&D Plan to the requirements specified in TEA–21, Section 5108 "§ 508(c)(2)":

(A) an identification of the general goals and objectives of the Department for surface transportation research and technology development

> "The goals and objectives of the DOT Strategic Plan are stated in the R&D Plan. However, the "impact-based performance measures" stated in Chapter V of the R&D Plan differ from the performance goals in DOT's Strategic Plan and Performance Plans. For instance, in the area of safety, the R&D Plan includes reference to motorcycle related fatalities and injuries and child occupant fatalities, which are not mentioned in DOT's performance goals. Conversely, the R&D Plan does not mention other DOT safety performance goals, such as those related to seat belt use and large-truck fatalities and injuries, or any of the safety performance measures in nonhighway modes."

(B) a description of the roles of the Department and other Federal agencies in achieving the goals identified under subparagraph (A), in order to avoid unnecessary duplication of effort

> "The R&D Plan lists other (non-DOT) federal agencies involved with each of the partnership initiatives (Chapter III). A few specific interagency activities are mentioned in the descriptions of the initiatives. Under "Enabling Research" (Chapter IV there are a few references to joint activities with other agencies, but there is no discussion of related research that is not under DOT sponsorship. There is no general discussion of the various missions of the different agencies, their (presumably) complementary responsibilities, the consequent differences in their roles in R&T, and the potential for interaction and synergy. Chapter II mentions the NSTC Subcommittee on Transportation R&D as a mechanism for coordinating federal transportation R&D; however, the only effort of this committee that is mentioned is the production of a strategic plan. It is not clear how actual coordination of federal activities is to take place.
>
> "Also, regarding roles, there is more focus on "technology" than on "research" (see p. 6 of the 2000 Performance Plan, for example), which is considered more the classic federal role. On the other hand, the distinction between the technology partnership initiatives and the enabling research is not well explained."

(C) a description of the overall strategy of the Department, and the role of each of the operating administrations of the Department, in carrying out the plan over the next 5 years, including a description of procedures for coordination of the efforts of the operating administrations of the Department and other Federal agencies

> "DOT's overall strategy with respect to R&T mirrors the NSTC Strategy, the main elements of which are strategic planning, partnership initiatives, enabling research, and training and education. It is not always clear from the GPRA documents or the R&D Plan, however, exactly how R&T supports the Department's strategic goals.
>
> "The efforts of the operating administrations are coordinated through DOT's Research and Technology Coordinating Council, which is mentioned in Chapter II. No further description of coordination procedures is offered. The operating administrations involved in each partnership initiative are listed under the initiative, and many of the research activities of the operating administrations are described under enabling research. There is no overall discussion of the roles of each administration over the next 5 years. (For instance, it would be appropriate to point out the primary role of FHWA, NHTSA, and FMCSA in reducing transportation fatalities, given that 94 percent of these fatalities are highway related. Other operating administrations may have stronger roles in supporting other strategic goal areas.)"

(D) an assessment of how State and local research and technology development activities are contributing to the achievement of the goals identified under subparagraph (A)

"There is no discussion of state and local R&T activities in the document. Even under the section "Issues as Seen by the Stakeholders" there is no direct reference to state DOTs. Under "Paving the Way for R&D Implementation" there is a brief reference to "state, tribal, county, and city government agencies," but no acknowledgment of the role of these agencies as owners and operators of important parts of the transportation system, and therefore as critical partners in the conduct of research and the development and implementation of new technologies."

(E) details of the surface transportation research and technology development programs of the Department, including performance goals, resources needed to achieve those goals, and performance indicators as described in [GPRA—see Tab 1, Section 1115(a)], for the next 5 years for each area of research and technology development

"Chapter V, "Measuring Success," provides a general discussion of GPRA and performance measurement, but this discussion is not applied concretely to DOT's R&T programs. A list of impact-based performance measures is included in Table V–2, but these differ from the performance goals and indicators in the Department's Strategic Plan and Performance Plans. It may be necessary to establish intermediate goals for R&T activities, but it should be clear how accomplishment of these intermediate goals will bring the Department closer to achievement of its ultimate goals. The goals in the R&D Plan are not clearly associated with the specific R&T activities described in the plan; that is, it is not clear which enabling research or partnership initiatives are aimed at each performance goal and how they are expected to contribute to achieving that goal. There is no discussion of resource needs. The only reference to time frame appears to be the categorization of enabling research as near-term (5 years or less) or long-term (more than 5 years)."

(F) significant comments on the plan obtained from outside sources

"Understandably, there are no comments from the NRC committee since the committee met for the first time in February 2000. However, there are also no comments from other outside sources."

(G) responses to significant comments obtained from the National Research Council and other advisory bodies, and a description of any corrective actions taken pursuant to such comments

"Again, it was not possible for responses to the NRC committee to be included, but if other outside sources were consulted, their comments should have received responses. If none were consulted, such consultation should take place before the next version of the plan is published."

Assessment of GPRA documents and the R&D Plan with respect to the committee-developed questions derived from the requirements found in GPRA:

(1) Do the Strategic Plan and Performance Plans include R&T as contributors to achieving strategic goals?

"The Strategic Plan and Performance Plans include R&T among the activities DOT will undertake to achieve its goals. In fact, R&T is identified as an overall management strategy for the Department. The 1999 Performance Plan presents additional R&T activities under each strategic goal area, categorizing them by mode. The 2000 Performance Plan aligns R&T more directly with performance goals under each strategic goal area. There is little mention of research in the 2001 Performance Plan. Many of the activities for 2001 are the same as or similar to those in the 1999 Performance Plan. There is no explanation of how the activities in each year differ."

(2) If so, is the R&T related to the goals and is the relationship clearly explained in the documents?

"The specific R&T activities in the Strategic Plan appear to be merely illustrative since they clearly do not represent all the R&T activities of the Department. It is not clear whether these examples are the most closely related to DOT's strategic goals.

"The format used in the 2000 Performance Plan gives a better sense of how R&T supports the goals of the Department and appears to have led

to a better categorization of the R&T activities. For instance, in the 1999 Performance Plan, the Partnership for a New Generation of Vehicles and testing of intelligent transportation systems (ITS)/commercial vehicle operator technologies at border crossings are categorized under highway safety. While these activities may have safety implications, they are more directly focused on the Human and Natural Environment and Economic Growth and Trade goals, respectively, which is where they are categorized in the 2000 Performance Plan.

"The relationship between specific R&T activities and the performance goals is not explained in the Performance Plans; however, it is probably not reasonable to expect such explanation without these plans becoming overly long. A more detailed explanation of how R&T activities support DOT goals would more appropriately be included in the Department's R&D Plan.

"In the R&D Plan, the descriptions of the partnership initiatives provide better explanations, in some cases, of the need for the technologies involved than is found in the Performance Plans. However, while the partnership initiatives are correlated with the strategic goals, they are not clearly linked to the performance goals, which focus on more specific outcomes. For instance, many of the partnership initiatives and enabling research efforts are directed toward "safety," but it is difficult to tell whether they are oriented strategically to address the issues and problems whose resolution offers the most promise for reducing specific kinds of fatalities and injuries. Therefore, the rationale for the R&T focus is not always clear."

(3) Does the Performance Report or the R&D Plan include: (a) A summary of results of previous fiscal years' R&T?

"Such a summary is not included in either document."

(b) An analysis of the relationship between R&T results and DOT's strategic goals?

"Since the results of R&T are not included in the plan, such an analysis is also not included."

(c) A description of the methodology used for assessing results?

"The R&D Plan addresses performance measurement somewhat theoretically, but does not apply it to specific R&T activities. The Strategic Plan (p. 64) indicates that DOT will measure the impact of R&T on transportation system performance through benchmarking efforts. This particular activity is not mentioned in the 1999 Performance Plan, although that plan does indicate that DOT will consider using International Organization for Standardization (ISO) 9000 certification and Malcolm Baldridge or President's Quality Award criteria to perform baseline assessments of the performance of DOT R&T facilities. The 2000 Performance Plan indicates that this baseline assessment will be completed in fiscal year 2000. However, it appears that the criteria to be used had still not been chosen when the plan was written since the three mentioned above are still listed as possible criteria, and a fourth (Software Engineering Institute's Capability Maturity Model certification) is added. Also, it is not clear that an assessment of R&T facilities will encompass an assessment of R&T results. The reports do not assess the contributions of DOT R&T to the achievement of goals and performance measures relative to the contribution of other DOT actions and programs. Although not explicitly called for in TEA–21 or GPRA, DOT may wish to include this type of assessment in its benchmarking efforts."

(d) A description of significant changes in the R&T undertaken compared with what was included in that year's plan (planned R&T that was not performed and why not, unplanned R&T that was performed and why)?

"This description does not appear to be provided in any of the documents."

(4) How are the following processes handled: (a) Gathering input from stakeholders and incorporating it into the plan and report

"Answered under (F), above."

(b) Mechanisms for coordination and cooperation among public and/or private entities

"Coordination among modal administrations is addressed under (C), above. Coordination among federal departments is addressed under (B),

above. The R&D Plan also lists nonfederal entities that are (or could be) involved in particular partnership initiatives. Coordination with these entities is not discussed."

(c) Tracking of progress on R&T activities

"There is no progress tracking in the R&D Plan. Since this is the first plan of its kind under the GPRA regime, it may be more reasonable to expect progress tracking in later versions of the document."

Additional Specific Comments About R&D Plan

In reviewing the R&D Plan, the committee identified some additional specific areas in which the plan could be improved. Some of these are matters of format, structure, or editing. Others refer more to the substance of the plan. Addressing these observations should help create a document that better reflects the transportation R&T enterprise and is more understandable to the reader.

CHAPTER III: PARTNERSHIP INITIATIVES AND TECHNOLOGY SHARING

The partnership initiatives are ordered differently in the text and in the tables of Chapter III. This makes it somewhat difficult to compare the two.

It might be clearer to list DOT programs (pp. III–33 to III–43) directly under the corresponding partnership initiatives (pp. III–3 to III–25) so that it would be easier to see how they are related.

The Next Generation Vehicle initiative is referred to by different names in various parts of the document. Consistent use of one name would be clearer.

Descriptions of partnership initiatives and how they are related to the strategic goals are not consistent. For instance, PNGV is included under Next Generation Surface and Marine Transportation Vehicles on page III–9 and under the Intelligent Vehicle Initiative on page III–34. Safety is indicated as a primary DOT strategic goal for the Monitoring, Maintenance, and Rapid Renewal of the Physical Infrastructure initiative, but does not figure significantly in the descriptions of this initiative on pages III–19 to III–20 and III–39 to III–41. Next Generation Global Air Transportation is said to support Mobility and Economic Growth and Trade on p. III–30, but the description of the initiative on p. III–35 suggests a significant contribution to Human and Natural Environment.

CHAPTER IV: ENABLING RESEARCH

The distinction between short-term and long-term in this chapter is interesting, but somewhat confusing. Much of the research characterized as long-term appears to be aimed at about the same time horizon as some of the partnership initiatives, which might be expected to be more short-term in nature. Where is the truly long-term, high-risk, "enabling" research being done?

CHAPTER VI: IMPLEMENTATION ISSUES AND INCENTIVES

The discussion of "user stakeholder" issues generally emphasizes user obstacles to implementation, such as liability, economic, and privacy concerns. This section should also include the opportunities for implementation and the motivations users may have to support implementation.

The chapter goes into some detail on implementation of a few specific technologies (free flight and ITS technologies). It might make more sense to include these discussions under the appropriate partnership initiatives or enabling research areas and reserve this chapter for analysis of overarching issues in the implementation of R&T, such as institutional, procurement, educational, and liability issues, which tend to arise in many technology areas.

The section on "Paving the Way for R&D Implementation" focuses solely on procurement reform. Though this is a critical implementation issue to address, it is not the only one. Studies have identified various factors that appear to be associated with successful implementation of R&T. For example, implementation is more successful when users are involved with the research from the beginning (a good argument for partnerships) and when there are champions at different levels of an organization. This chapter could address some of these factors.

ATTACHMENT 3

DOT STRATEGIC AND PERFORMANCE GOALS FOR SAFETY

These goals are taken from the U.S. Department of Transportation Performance Plan for fiscal year 2000.

DOT has strategic goals in five areas: Safety; Mobility; Economic Growth and Trade; Human and Natural Environment; and National Security.

The strategic goal for safety is: "Promote the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage."

The performance goals contributing to the achievement of the strategic goal for safety are:

Highway Fatality and Injury Rates.—Reduce the rate of highway-related fatalities per 100 million vehicle miles traveled (VMT) from 1.7 in 1996 to 1.5 in 2000. Reduce the rate for injuries from 141 in 1996 to 124 per 100 million VMT in 2000.

Alcohol-Related Highway Fatalities.—Reduce the percentage of highway fatalities that are alcohol-related to less than 35 percent in 2000, from a 1996 baseline of 40.9 percent.

Seat Belt Use.—Increase seat belt usage nationwide to 85 percent by 2000 and 90 percent by 2005. Usage in 1997 was 69 percent.

Large Truck-Related Fatality and Injury Rates.—Reduce the rate of fatalities involving large trucks per 100 million truck VMT from 2.8 in 1997 to 2.5 in 2000. Reduce the rate of injuries involving large trucks per 100 million truck VMT from 69.3 in 1997 to 64.4 in 2000.

Air Carrier Fatal Accident Rate.—Reduce the fatal aviation accident rate for commercial air carriers from a 1994–1996 baseline of 0.037 fatal accident per 100,000 flight hours. The 2000 target is 0.033 per 1,000,000—with the reduction to be achieved in 6 key areas outlined in the Safer Skies Agenda.

General Aviation Fatal Accident Rate.—Reduce the general aviation fatal accident rate from a 1994–96 average of 1.67 per 100,000 flight hours to (specific target to be developed).

Runway Incursions.—Reduce the number of runway incursions to a level 15 percent below a 1997 baseline of 318 incursions. The fiscal year 2000 target is at or below 270 incursions.

Operational Errors and Deviations (Air Traffic).—Reduce the rate of operational errors and deviations by 10 percent from the 1994 baselines of 0.54 errors and 0.11 deviations per 100,000 facility activities. The 2000 target rates are 0.486 for errors and 0.097 for deviations.

Recreational Boating Fatalities.—Reduce recreational boating fatalities to 720 (or fewer) fatalities in 2000. The 1997 baseline in 819 fatalities.

Maritime Search and Rescue.—Save at least 93 percent of all mariners, and at least 80 percent of all property, reported in imminent danger.

Passenger Vessel Safety.—Reduce the number of high-risk passenger vessel casualties to 47 per 1,000 vessels in 2000. The 1996 baseline is 48 per 1,000.

Rail Crash and Fatality Rates.—Reduce the rate of rail-related crashes from 3.91 per million train-miles in 1995 to 3.32 (or less) in 2000. Reduce the rate of rail-related fatalities from 1.71 per million train-miles in 1995 to 1.54 (or less) in 2000.

Rail Grade-Crossing Crash Rate.—Reduce the rate of grade-crossing crashes from 2.85 per the product of (million train-miles times trillion highway VMT) in 1995 to 2.14 (or less) in 2000.

Rail Trespasser Fatality Rate.—Reduce the rate of rail-related trespasser fatalities from 2.81 per the product of (million train-miles times billion U.S. population) in 1995 to 2.53 (or less) in 2000.

Transit Fatality and Injury Rates.—Reduce the transit fatality rate from 0.52 fatalities per 100 million passenger-miles-traveled in 1996 to 0.50 (or less) in 2000. Reduce the injury rate from 127 per 100 million passenger-miles-traveled in 1996 to 122 (or less) in 2000.

Pipeline Failures.—Decrease the number of natural gas transmission pipeline failures from 4,933 in 1994 to 4,451 in 2000.

Hazardous Material Incidents.—Reduce the number of serious hazardous materials incidents in transportation to 411 or fewer in 2000 from a peak of 464 in 1996.

ATTACHMENT 4

FRA R&D PROJECT DEVELOPMENT AND SELECTION PROCESS[6]

Currently, the FRA R&D program is developing a structured process to document the method by which FRA R&D management identifies research areas and selects specific R&D projects for funding. FRA R&D management currently uses such a process when identifying projects for funding and submitting budget requests. How-

[6] This material was provided by the Federal Railroad Administration Office of Research and Development.

ever, the current effort is intended to provide documentation of the process so it is visible to all FRA R&D stakeholders. FRA R&D is developing this structured approach with guidance from the Transportation Research Board (TRB) Committee for Review of the FRA R&D Program. Most recently, the FRA R&D presented the proposed approach to the TRB Committee during November 1999 and the Committee recommended the FRA R&D program employ the approach in fiscal year 2002 budget submissions.

The structured approach for FRA R&D project development and selection is presented below. The approach consists of five logical steps which, initially, will be applied to the entire R&D program. Subsequently, as new information becomes available about sources of harm, the logical steps may be followed for specific types of harm to add to the list of potential R&D projects.

STEP 1: REVIEW OF RAIL INDUSTRY HISTORICAL AND POTENTIAL HARM

The first step in the FRA R&D project development and selection process is a review of recent rail industry harm data and an estimation of causes of potential for harm. Historical harm data is compiled in FRA rail accident databases and accident investigation reports. Potential for future harm can be understood by reviewing rail industry operating trends with expert knowledge of how railroad accidents occur.

The four relevant databases which hold historical rail incident data are the FRA's Rail Accident/Incident Reporting System (RAIRS), Highway-Rail Grade Crossing Accident/Incident Database, Railroad Injury and Illness Summary Database, and RSPA's Hazardous Materials Incident Database. The information in these databases is very detailed in terms of circumstances that contribute to accidents. However, these databases, typically, do not address specific causes of the harm that results from railroad accidents or incidents.

Detailed accident reports from the NTSB and the FRA are the most important source of information, compiled by experts, about accident circumstances that contribute to harm. While detailed investigations are undertaken for relatively few railroad accidents, the most serious accidents, in terms of harm, have been intensively investigated and much can be learned through review of these reports.

Finally, since accident databases and accident reports can only reflect historical accident causes and circumstances, meaningful countermeasures to prevent harm must also address railroad industry operational trends. In this way countermeasures may be developed to address causes for harm that are not reflected in the historical databases.

STEP 2: CONDUCT FAILURE ANALYSIS

For a given accident cause or factor contributing to harm, fault-tree logic is applied to identify specific items to be addressed by countermeasures. These specific items represent points along the accident chain-of-events at which the accident, or subsequent harm, or both, could have been prevented. Countermeasures are proposed with the goal of breaking the accident or harm chain-of-events at the points identified. These countermeasures are proposed with an understanding of current regulatory and industry practices for the relevant area of rail operations. Examples of types of contermaeasures proposed include: Regulation; Industry standards and best practices; Equipment and infrastructure improvements; Enforcement; and Education.

STEP 3: SURVEY GOVERNMENT AND INDUSTRY COUNTERMEASURES AND R&D REQUIREMENTS

Once specific countermeasures are identified, FRA R&D will review current and potential industry and government countermeasures to identify areas of opportunity for R&D. That is, FRA R&D will identify countermeasures that would be enabled by R&D. For example, a potential operating rule may need research into the train speed regimes at which a type of train control system affords safe operation.

STEP 4: DEVELOP AND RATE INDIVIDUAL PROJECTS

For each countermeasure that may be aided by R&D, one or more R&D project summaries are developed to describe projects that provide information to enable the countermeasures. The project summaries are structured descriptions of projects that will be used to compare and select projects during R&D program development. Project summaries address expected outputs and outcomes, project costs and durations, as well as implementation issues for project results. Based on the project summaries, projects are then rated according to objective criteria for expected contribution to safety and likelihood of success. For a given program area, these project rat-

ings are plotted in two-dimensions (likelihood of success versus contribution to safety) to provide a high-level comparison tool for the project selection process.

STEP 5: SELECT PROJECTS AND ASSIGN TO PROGRAM AREAS

The last step in the FRA R&D program development process entails selecting projects for each program area based on the two-dimensional plots and project summaries. The goal is to select the best research opportunities available to obtain the best return on investment possible from the FRA R&D budget. That is, the most highly rated projects, regardless of program area, are selected until the desired overall funding request level is reached. Once the list of funded projects is completed, each project is assigned to one of the FRA R&D program areas. The FRA R&D budget request, for each program area, is the sum of the funding required for each of the selected projects in the program area.

Question. Assuming no increase in funds for fiscal year 2001, what could be done to initiate research on transportation infrastructure assurance and fatigue management?

Answer. The Administration has no alternative proposal to fund the two critical, multi-modal research areas of transportation infrastructure assurance and human-centered systems.

The funding requested in RSPA's budget for these two areas of research is intended not to substitute for other operating administrations' resources, but to build on and leverage these resources as well as investments made by other Federal agencies, the states and the private sector.

Question. Please describe in detail why funds are spent on international science and technology assessment. Who receives those funds and what is done with the results of this investment?

Answer. To ensure that the United States maintains its technological lead in an ever-increasing global environment, it is essential to understand the priorities and research activities of competitor nations. International corporations, travel and telecommunications, and the number of foreign students in institutions of higher learning all over the globe are growing at a unprecedented rate. As a result, both the practice and the propagation of transportation research have attained global proportions.

RSPA released a National Science and Technology Council document entitled Comparison of International Transportation R&D: Expenditures and Priorities in September 1999. It documents research in the seven countries that undertake the vast majority of transportation R&D around the world today. The document was developed at the DOT Volpe Center, with inputs from the United Nations Economic Commission for Europe, the Organization for European Cooperation and Development, the National Academy of Sciences, and similar groups. The document is a key resource in establishing research priorities, as well as areas for productive collaboration. It is available on the Internet at http://www.volpe.dot.gov/resref/strtplns/nstc/citrdep/index.html.

A second edition of this report is currently under development covering the next tier of countries active in transportation R&D. They are: Argentina, Brazil, Mexico, Australia, China, India, South Korea, Netherlands, Spain, Sweden, and Switzerland.

In addition, the U.S. Library of Congress is assisting RSPA in developing an International Transportation Research and Technology Information base with information on current and future transportation R&T developments in other developed nations. Such a database will help ensure that Federal investment in transportation R&T is coordinated for efficient use of Federal funds, focused on identified critical projects, and limited to areas in which major public benefits can be achieved through cost-shared Federal research.

Question. Please provide a discussion of the value and uses of products obtained from research planning and management projects in fiscal year 1999 or 2000. Please indicate which projects are ongoing (into 2001), or have been completed.

Answer. As pointed out by the first NRC/TRB review of the Federal Transportation Research and Development Strategic Planning Process, this process helps leadership within the Department and across the Federal Government define transportation priorities and identify key R&D initiatives. The plans that have been developed as a result of this process focus our attention on the priorities and provide the framework for solving national transportation problems through R&D.

All of RSPA's planning and management projects undertaken in fiscal year 1999 and fiscal year 2000 are ongoing and will continue in fiscal year 2001. Plans are revised as new knowledge is obtained, visions are refined and goals are adjusted.

The variety of research planning materials that have been developed under this activity have already had the following effects:

—Promoted collaborative research (e.g., aviation R&D, fuel cells)
—Promoted consideration of longer-term research (e.g., nanotechnology)
—Raised the consciousness of senior DOT leadership of R&D as a tool to achieve Departmental goals and solve transportation problems (e.g., R&T is a corporate management strategy for DOT)
—More explicitly linked research to accomplishment of Departmental goals (e.g., 2001 Performance Plan and 1999 Performance Report)
—Created a better-focused agenda of research activities and priorities (e.g., DOT Transportation R&D Plan (Second Edition))
—Identified new opportunities for co-operative implementation (e.g., Transportation Infrastructure Assurance R&D, Human-centered Systems, Advanced Vehicle Technologies Program)
—More effectively involved non-Federal participants (industry, State/local government, academia) in support and conduct of research (e.g., Intelligent Vehicle Initiative, ITS Deployment, National Highway R&T Partnership Initiative, National R&D Plan on Aviation Safety, Security, Efficiency and Environmental Compatibility)

TRANSPORTATION INFRASTRUCTURE ASSURANCE R&D

Question. Please identify all ongoing research in all DOT modes that identifies and/or addresses transportation infrastructure and security vulnerabilities. What levels of funding were appropriated for these programs in fiscal years 1999 and 2000 and what levels are requested for fiscal year 2001?

Answer. The following is a list of research in all DOT operating administrations that address transportation infrastructure and security vulnerabilities and the corresponding levels of funding.

DOT Administration	Activity	Fiscal year	
		1999	2000
FAA	Explosive/Weapons Detection	$41,700,000	$37,605,000
FAA	Airport Security	2,708,000	2,385,000
FAA	Human Factors	5,282,000	5,256,000

In addition, the Federal Transit Administration has carried out limited investigations to improve personal security and property protection at transit facilities leveraging DOD funds in fiscal year 1999 and fiscal year 2000.

The following is a breakdown of all DOT operating administrations' funding requests for fiscal year 2001 to support the Transportation Infrastructure Assurance Research and Development Program:

DOT Administration	Activity	Fiscal year 2001 funding
FAA	Passenger/Cargo Security and Intrusion Detection	$54,900,000
RSPA	Chemical and Biological Agent Detection, Intermodal Terminal Security, and Human Factors.	3,400,000

These activities are described in a "DOT Transportation Infrastructure Assurance R&D Plan" published in September 1999 which aligns R&D investments with the missions and responsibilities of each organization. The Transportation Infrastructure Assurance R&D Program is intended to integrate all DOT efforts.

UNIVERSITY MARINE TRANSPORTATION RESEARCH

Question. Please identify all ongoing research at MARAD, Coast Guard, and RSPA that addresses marine transportation mobility, safety, environmental protection and security. What levels of funding were appropriated for these programs in fiscal years 1999 and 2000 and what levels are requested for fiscal year 2001?

Answer. The levels of funding for research related to marine transportation mobility, safety, environmental protection and security within MARAD, Coast Guard and RSPA are as follows:

DOT Administration	Activity	Fiscal year		
		1999	2000	2001
MARAD	N/A			
Coast Guard	Improve Search & Rescue Capability	$875,000	$1,162,000	$457,000
Coast Guard	Waterways Safety & Management and Aids to Navigation.	2,116,000	1,444,000	1,196,000
Coast Guard	Marine Safety	3,198,000	3,108,000	5,448,000
Coast Guard	Interagency Ship Structure Committee	289,000	159,000	381,000
Coast Guard	Marine Environmental Protection	1,694,000	2,263,000	1,142,000
Coast Guard	Comprehensive Law Enforcement	1,129,000	3,213,000	4,422,000
Coast Guard	Technology Investment	4,350,000	3,746,000	3,991,000
RSPA	University Marine Transportation Research.			2,500,000

HUMAN-CENTERED SYSTEMS RESEARCH PROGRAM

Question. Please identify all ongoing human-centered systems research at the Department of Transportation, within each modal administration and interagency program. What levels of funding were appropriated for these programs in fiscal years 1999 and 2000 and what levels are requested for fiscal year 2001?

Answer. The Department's Operating Administrations have engaged in modal-specific human factors research and development activities. They promulgate their results, typically in the form of safety regulations, to their specific transportation sector.

DOT did not receive appropriated funds for human-centered systems research in fiscal year 1999 or fiscal year 2000. In fiscal year 2001, RSPA has requested $3,000,000 to support this One-DOT effort. FAA, NHTSA, FMCSA, FHWA, FRA, FTA and USCG also recognize the critical importance of this effort in terms of its potential to reduce fatalities and property loss due to human error. They are willing to contribute funding for this effort in fiscal year 2000.

ADVANCED VEHICLE TECHNOLOGIES PROGRAM

Question. What is the status and accomplishments to date of the advanced vehicle technologies program?

Answer. The Advanced Vehicle Technologies Program (AVP), which is entering its second year, represents a successful transition and shift in emphasis of the Electric Vehicle and Hybrid Electric Vehicle (EV/HEV) program managed by the Defense Advanced Research Projects Agency (DARPA) from fiscal year 1993 through fiscal year 1998. AVP builds on the momentum achieved from investment by DARPA and private-public partners (a total of over $250 million from 1993–1998) for advancing medium and heavy electric and hybrid-electric vehicle and infrastructure technologies. The partners have provided at least an equal cost share with the Government to accelerate the development and deployment of advanced vehicle, component and infrastructure technologies into the market place. The DARPA partnership initiated over 300 projects with 450 companies and helped develop:

—Hybrid electric transmissions
—Auxiliary power units and motors
—Advanced battery and charger systems, and controllers
—Flywheels to augment batteries
—Advanced materials to reduce weight.

Since management under DOT beginning in fiscal year 1999, program directions have been announced for fiscal year 1999, fiscal year 2000 and fiscal year 2001–2003. In response to the fiscal year 1999 solicitation, 26 projects were awarded to consortia in fiscal year 1999. These important projects are underway and well ahead of schedule in great part due to the AVP's fast-tracked public and private partnership and the use of "other transactions" agreements. Project selection for fiscal year 2000 and fiscal year 2001 is nearing completion. Funding for fiscal year 2001 projects will be awarded upon enactment of the fiscal year 2001 appropriations.

Question. Please outline the makeup of the seven national consortia, and describe the types of technologies each consortia are developing.

Answer. The seven quasi-regional consortia consist of over 500 private companies, universities, laboratories and state and local governments. The membership of the consortia fluctuates on a periodic basis.

(1) WestStart—CALSTART is developing the following types of technologies: a fuel cell auxiliary power unit for over-the-road trucks; an electric propulsion system for medium- and heavy-duty vehicles; a hybrid electric transit bus with flywheel power management; an all-purpose electric airport tow tractor; and electrochemical capacitors using carbon lead-oxide electrodes.

(2) ELECTRICORE is developing the following types of technologies: a 600–900 Volt test system for heavy duty hybrid electric vehicles; passenger trams with installed microturbines; and advanced silicon carbide power electronics.

(3) The Hawaii Electric Vehicle Demonstration Project is developing the following types of technologies: electric vehicle charging infrastructure; a zero-emission 100 passenger electric tram for airports; and a battery cycle life prediction tool.

(4) The Mid-Atlantic Regional Consortium for Advanced Vehicles is developing the following types of technologies: an unmanned hybrid electric high mobility multi-purpose wheeled vehicle; a nickel-hydrogen segmented battery for hybrid electric military vehicles, commercial trucks, and buses; an optimized compression ignition engine generator system for heavy-duty hybrid electric vehicles; an integrated simulation and testing system for electric vehicle batteries; smaller, better inverters with polymer multi-layer capacitors; and a refined and tested hybrid electric Bradley Fighting Vehicle demonstrator.

(5) The Northeast Advanced Vehicle Consortium is developing the following types of technologies: a sustainable energy system for a national recreation area; a heavy-duty hybrid electric vehicle emission test certification protocol; a battery-electric-dominant heavy-duty hybrid electric school bus; and jet vapor deposition for catalyzing fuel cell membranes.

(6) The Southern Coalition for Advanced Transportation is developing the following types of technologies: a utility industry trouble truck and mobile power source; an improved hybrid electric high mobility multi-purpose wheeled vehicle; and advanced components that have been demonstrated on the Advanced Technology Transit Bus.

(7) Sacramento Electric Transportation Consortium is developing the following types of technologies: a nickel metal hydride battery System for an electric bus; and a plastic lithium ion hybrid electric vehicle battery.

Question. How is the program managed? Is there a strategic plan? If so, has it ever been published?

Answer. The Research and Special Programs Administration (RSPA) manages the AVP in cooperation with other DOT operating administrations and Federal agencies, including the Departments of Defense and Energy. The Electric Vehicle and Hybrid Electric Vehicle Program (EV/HEV), from which the AVP was derived, was managed by the Defense Advanced Research Projects Agency (DARPA) using seven geographically dispersed regional consortia representing private industry and other non-Federal organizations. The consortia were competitively selected to organize industry teams to develop innovative technology solutions, enhance competition, provide a decentralized management structure, and accelerate technology development and national deployment.

The AVP continues to rely on this management approach and structure as well as the use of innovative procurement mechanisms, such as "other transactions" to accelerate the development and deployment of technologies. In response to an annual program announcement, projects are selected through a process of proposal, submission, review, and acceptance. Each proposal is reviewed jointly by DOT and, as appropriate, other agencies.

RSPA recently completed a strategic plan for DOT medium- and heavy-duty vehicle R&D. This plan, which covers the AVP, responds not only to a Congressional mandate but documents the early stages of what will be an ongoing strategic planning process specific to medium- and heavy-duty vehicle R&D. Copies will be provided to the Committee upon completion of the printing process, which should occur soon.

Question. Did the Department of Defense and the Department of Energy contribute any funds to this partnership in fiscal year 2000?

Answer. Neither the Department of Defense nor the Department of Energy contributed any funds to this partnership in fiscal year 2000.

Question. Is any Department of Defense or Department of Energy funding requested for the AVTP program in the fiscal year 2001 budget request? If so, how much is requested in each budget, and from what agencies and accounts?

Answer. Neither the Department of Defense nor the Department of Energy requested fiscal year 2001 funding for the AVP.

UNIVERSITY TRANSPORTATION CENTERS GRANTS PROGRAM

Question. Specify what you have done since last year to improve the effectiveness of the University Transportation Centers program.

Answer. The following activities have been accomplished since last year to improve program effectiveness:

—established a new UTC grant requirement that requires a DOT representative to participate in each UTC's research selection process to promote the accomplishment of DOT goals and objectives, as well as to facilitate information exchange;

—held an open competition for the ten regional UTC grants to ensure that the grants were awarded to the best applicants;

—instituted baseline measures and annual performance indicators for each UTC, in accordance with the Government Performance and Results Act; and

—began holding site visits at the TEA–21 UTCs with multimodal DOT teams assessing and evaluating each center's work.

Question. Please display the University Transportation Centers (UTC) budget for fiscal years 1999, 2000, and 2001. Include funding sources, amounts released in grants (by TEA–21 institution groupings), and administrative and evaluation costs.

Answer. The following tables are provided. They do not include funding for three RSPA FTE funded from the Highway Trust Fund.

Funding sources	Fiscal year		
	1999	2000 (estimate) [1]	2001 (estimate)
FTA R&D Appropriations	[2] $5,940,000	$1,200,000	$1,200,000
Transit Account of the Highway Trust Fund	.....	4,800,000	4,800,000
Highway Account of the Highway Trust Fund	22,640,000	23,670,000	23,670,000
Total Program Funding	28,580,000	29,670,000	29,670,000

[1] Reimbursable Agreements have not yet been executed with FTA and FHWA.
[2] FTA did not indicate how much came from which source.

Costs [1]	Fiscal year		
	1999	2000 (estimate)	2001 (estimate)
Group A	$8,744,360	$8,622,900	$8,622,900
Group B	2,097,600	3,449,160	3,449,160
Group C	6,528,500	6,527,026	6,527,026
Group D	10,992,000	10,898,320	10,898,320
Administration and Evaluation	217,540	172,594	172,594
Total	28,580,000	29,670,000	29,670,000

[1] This table indicates the fiscal year of the funding awarded and not the year in which the grants were made.

Question. Please list all of the universities now receiving funds authorized in TEA–21 and the amounts provided to each university in fiscal years 1999, 2000, and anticipated for fiscal year 2001.

Answer. The following table is provided:

Name of recipient	Fiscal year			
	1999 authorized	1999 awarded	2000–2001 authorized (per year)	2000–2001 est. award (per year)
Alabama, U. of	$750,000	$655,500	$750,000	$646,718
Arkansas, U. of	750,000	655,500	750,000	646,718
Assumption College	300,000	262,200	500,000	431,145
California, U. of	1,000,000	[1] 890,000	1,000,000	862,290
Central Florida, U. of	300,000	262,200	500,000	431,145
City U. of NY	1,000,000	[1] 890,000	1,000,000	862,290

Name of recipient	Fiscal year			
	1999 authorized	1999 awarded	2000–2001 authorized (per year)	2000–2001 est. award (per year)
Denver, U. of	300,000	262,200	500,000	431,145
George Mason U.	2,000,000	1,748,000	2,000,000	1,724,580
Idaho, U. of	750,000	655,500	750,000	646,718
Iowa State U.	1,000,000	[1] 890,000	1,000,000	862,290
Marshall U.	2,000,000	1,748,000	2,000,000	1,724,580
MIT	1,000,000	[1] 890,000	1,000,000	862,290
Minnesota, U. of	2,000,000	2,000,000	2,000,000	2,000,000
Missouri-Rolla, U. of	300,000	262,200	500,000	431,145
Montana State U.	2,000,000	1,748,000	2,000,000	1,724,580
Morgan State U.	750,000	970,000	750,000	1,000,000
	+ ≤250,000		+ ≤250,000	
NC State U.	750,000	970,000	750,000	1,000,000
	+ ≤250,000		+ ≤250,000	
NCA&T State U.	750,000	655,500	750,000	646,718
NJIT	750,000	655,500	750,000	646,718
ND State U.	1,000,000	[1] 890,000	1,000,000	862,290
Northwestern U.	2,000,000	2,000,000	2,000,000	2,000,000
Penn. State U.	1,000,000	[1] 890,000	1,000,000	862,290
Purdue U.	300,000	262,200	500,000	431,145
Rhode Island, U. of	2,000,000	1,748,000	2,000,000	1,724,580
Rutgers U.	300,000	262,200	500,000	431,145
San Jose State U.	750,000	655,500	750,000	646,718
So. Carolina State U.	300,000	262,200	500,000	431,145
South Florida, U.of	750,000	655,500	750,000	646,718
Southern Calif., U. of	300,000	262,200	500,000	431,145
Tenn., U. of	1,000,000	[1] 890,000	1,000,000	862,290
Texas A&M U.	1,000,000	[1] 890,000	1,000,000	862,290
Wash., U. of	1,000,000	[1] 890,000	1,000,000	862,290
Wisc., U. of	1,000,000	[1] 890,000	1,000,000	862,290

[1] Amount includes $874,436 of fiscal year 1999 funds and $15,564 of unobligated fiscal year 1997 UTC Program funds. The fiscal year 1997 funds were used to increase the grants to the amount that had been publicized in the UTC Program competition as expected to be available that year.

Question. For each university which has received grants from the UTC program in fiscal years 1999 or 2000, please specify what research programs are supported, and describe what the Department is doing to integrate the research activities conducted by each center or university with the Department's own research.

Answer. To date, UTC grants awarded under TEA–21 have involved funding from fiscal years 1998 and 1999. Because UTC grants have historically been awarded at the end of the fiscal year, no fiscal year 2000 funding has yet been awarded. The 10 UTCs in Group A, the so-called Regional UTCs, were selected by competition in 1999 and thus have received only one year's funding.

All UTCs are empowered to select their research projects, but they must do so through a process that includes peers and other experts in the field, including at least one employee from the U.S. Department of Transportation (DOT). In addition to considering each proposal's technical completeness and feasibility, a UTC's selection process must include multiple additional rating factors, not least of which is the project's relevance to the UTC's chosen theme and to the Department of Transportation's strategic goals. Participation by DOT staff ensures a two-way conduit for information about on-going research between DOT and the university.

All UTCs are now required to post a brief project description for each research project on the UTC's respective web sites. These descriptions are to be provided in HTML format and are to use standard Transportation Research Board keywords. All final reports on research conducted with UTC funding, after required peer review, must be published on the UTC's web site in the same manner. This innovation in the program will greatly facilitate access to new and ongoing research by DOT researchers and planners. In addition, RSPA posts all DOT-sponsored university research on its website located at http://utc.dot.gov. The Internet makes possible direct interaction between academic researchers and outside experts.

All but one of the 33 UTCs have completed the strategic plan that is required as their first activity under the grant. In that plan, the UTC proposes and DOT approves a theme for its center that helps to focus its research program. The 33 UTCs have the following themes:

UTC Location	Center Theme
Assumption College	Transportation and Environmental Education for the Twenty-First Century.
City College of New York	Planning and Management of Regional Transportation Systems.
George Mason University	Deployment of Intelligent Transportation Systems.
Iowa State University	Sustainable Transportation Asset Management.
Marshall University	Transportation and Economic Development in Mountain Regions.
Massachuset ts Institute of Technology	Strategic Management of Transportation Systems.
Montana State University	Rural Travel & Transportation.
Morgan State University	Transportation: A Key to Human and Economic Development.
New Jersey Institute of Technology	Productivity Increases through Transportation Improvements.
North Carolina A&T State University	Urban Transit Performance in Small and Rural Areas.
North Carolina State University	Transportation and the Environment.
North Dakota State University	Rural and Intermodal Transportation.
Northwestern University	Infrastructure Technology.
Pennsylvania State University	Advanced Technologies in Transportation Operations and Management.
Purdue University	Safe, Quiet and Durable Highways.
Rutgers University	Transportation Infrastructure of High Volume Systems.
San Jose State University	Policy Guidance of Transportation Management Systems.
South Carolina State University	Professional Capacity Building in Transportation.
Texas A&M University	Transportation Solutions to Enhance Prosperity and the Quality of Life.
University of Alabama	Management and Safety of Transportation Systems.
University of Arkansas	Improving the Quality of Rural Life through Transportation.
University of California	Transportation Systems Analysis and Policy.
University of Central Florida	Advanced Transportation Systems Simulation.
University of Denver	Intermodal Transportation: Assessment, Planning, and Design.
University of Idaho	Advanced Transportation Technology.
University of Minnesota	Human-Centered Transportation Technology.
University of Missouri-Rolla	Advanced Materials & Non-destructive Testing Technologies.
University of Rhode Island	Intermodal Transportation and Advanced Transportation Infrastructure.
University of South Florida	Transit and Alternative Forms of Urban Transportation.
University of Southern California	Metropolitan Transportation.
University of Tennessee	Transportation Safety.
University of Washington	Transportation Operations and Planning.
University of Wisconsin	Optimization of Transportation Investment and Operations.

Question. How much of the fiscal year 1999 and 2000 monies will be allocated to any other DOT budget, and how much will be contracted to the partners?

Answer. Of the funds authorized in TEA–21 and allocated by FHWA and FTA, $63,100 in fiscal year 1999 and an estimated $64,750 in fiscal year 2000 was retained by FHWA, and $60,000 in fiscal year 1999 and an estimated $60,000 in fiscal year 2000 was retained by FTA for administrative expenses. Additionally, RSPA will be receiving approximately $300,000 from FHWA (Highway Trust Fund) for three FTEs to manage the UTC program.

Question. Please detail the agreements now in hand for industry matching funds for this program. For each project funded during fiscal year 1999 and 2000 show the amount of federal funding and any non-federal cost sharing received.

Answer. As required by TEA–21, each UTC must supply a dollar-for-dollar match for the federal funds awarded. Match must be from non-federal government sources, with the exception of three specified sources: (1) State Planning & Research funds; (2) LTAP; and (3) FHWA's technology deployment program. Each UTC is respon-

sible for securing matching funds as a requirement of its grant. In the financial status portion of its required annual progress report, each UTC must demonstrate that the matching funds have been obtained and expended in accordance with grant guidelines. However, in compliance with the Office of Management and Budget rules for federal grants, RSPA does not require the UTCs to supply information on federal vs. non-federal match for each individual activity conducted under their grants (as hundreds of research projects and dozens of educational activities are conducted under UTC grants each year, this would be considered overly burdensome under federal grant regulations).

Question. Which types of technologies are being pursued in this program?

Answer. TEA–21 requires the UTCs to conduct combined programs of research, education, and technology transfer under a strategic plan that is completed as the first activity under each grant. In order to promote innovation and originality among the centers, and to build most efficiently on the grantee universities' existing or proposed areas of expertise, the strategic plan allows the UTC to propose its own theme for DOT approval. DOT ensures that each UTC has a unique theme that relates to key national issues.

Once a UTC has chosen its theme, that theme provides a common focus for the center's activities. The following is a list of each UTC's theme:

UTC Location	Center Theme
Assumption College	Transportation and Environmental Education for the Twenty-First Century.
City College of New York	Planning and Management of Regional Transportation Systems.
George Mason University	Deployment of Intelligent Transportation Systems.
Iowa State University	Sustainable Transportation Asset Management.
Marshall University	Transportation and Economic Development in Mountain Regions.
Massachuset ts Institute of Technology	Strategic Management of Transportation Systems.
Montana State University	Rural Travel & Transportation.
Morgan State University	Transportation: A Key to Human and Economic Development.
New Jersey Institute of Technology	Productivity Increases through Transportation Improvements.
North Carolina A&T State University	Urban Transit Performance in Small and Rural Areas.
North Carolina State University	Transportation and the Environment.
North Dakota State University	Rural and Intermodal Transportation.
Northwestern University	Infrastructure Technology.
Pennsylvania State University	Advanced Technologies in Transportation Operations and Management.
Purdue University	Safe, Quiet and Durable Highways.
Rutgers University	Transportation Infrastructure of High Volume Systems.
San Jose State University	Policy Guidance of Transportation Management Systems.
South Carolina State University	Professional Capacity Building in Transportation.
Texas A&M University	Transportation Solutions to Enhance Prosperity and the Quality of Life.
University of Alabama	Management and Safety of Transportation Systems.
University of Arkansas	Improving the Quality of Rural Life through Transportation.
University of California	Transportation Systems Analysis and Policy.
University of Central Florida	Advanced Transportation Systems Simulation.
University of Denver	Intermodal Transportation: Assessment, Planning, and Design.
University of Idaho	Advanced Transportation Technology.
University of Minnesota	Human-Centered Transportation Technology.
University of Missouri-Rolla	Advanced Materials & Non-destructive Testing Technologies.
University of Rhode Island	Intermodal Transportation and Advanced Transportation Infrastructure.
University of South Florida	Transit and Alternative Forms of Urban Transportation.
University of Southern California	Metropolitan Transportation.
University of Tennessee	Transportation Safety.
University of Washington	Transportation Operations and Planning.
University of Wisconsin	Optimization of Transportation Investment and Operations.

Question. Please summarize the nature and amount of the research contracts that you awarded thus far during fiscal year 1999 and fiscal year 2000.

Answer. The UTC program does not award research contracts. In accordance with TEA–21, 33 universities received multi-year UTC grants in fiscal year 1998, which extend through fiscal years 1999, 2000, and 2001. Under its grant, each university is required to conduct a multimodal program of transportation education, research, and technology transfer. In fiscal year 1999, RSPA awarded $28.36 million in federal funds to the 33 UTCs; in fiscal year 2000, RSPA will award up to $33.25 million as designated by TEA–21, less any reduction due to the Highway Trust Fund obligation ceiling.

EMERGENCY TRANSPORTATION

Question. Why does RSPA consider it essential to have an SES executive to head the OET?

Answer. The Director of the Office of Emergency Transportation has numerous senior level managerial decision-making responsibilities sufficient to support Senior Executive Service (SES) status. The Director is responsible for the development and implementation of policy, plans, and procedures for emergency management of the national civil transportation system. The Director serves as the Department's principal representative, spokesperson, and advisor on matters of civil transportation emergency preparedness and response in the full spectrum of crisis. The Director develops national policies, plans and procedures, and is the primary liaison with the Federal Emergency Management Agency (FEMA) and other Federal, State, local and private sector authorities. The Director provides direction to headquarters and field response teams, and represent the Department on the Catastrophic Disaster Response Group, a senior policy advisory group, chaired by FEMA. As the manager of the Regional Emergency Transportation Coordination (RETCO) program, the Director coordinates the activities of Senior SES officials and U.S. Coast Guard admirals. On the international level, the Director serves as the principal Departmental representative, spokesperson, and advisor on matters of civil transportation emergency preparedness and response in time of national disasters.

Question. What new statutory or administrative requirements have been placed on the Office of Emergency Transportation which necessitates the increase of staff from 7 to 12 positions?

Answer. Presidential Decision Directives (PDD) 39, 62 and 63, and 67 place many new requirements on Office of Emergency Transportation (OET). These PDDs address the critical topics of weapons of mass destruction, continuity of operations and critical infrastructure protection. They place an extraordinary responsibility on a small office with a Department-wide mission. Since the terrorist attack on the Murrah Federal Building in Oklahoma City, OK, Federal departments and agencies have had an increased responsibility for readiness to respond to disasters. OET has been the focal point for this responsibility in DOT. Current staffing cannot be stretched any further to take on the added work required to meet the readiness requirements.

In addition to the PDD requirements, the increasing involvement by DOT and OET in disaster-response efforts, the added responsibility of maintaining and managing the DOT relocation site, coordinating the development of DOT continuity of operations plans for the individuals DOT operating administrations, and maintaining oversight for the successful operation of the DOT Crisis Management Center, more staffing is required to successfully carry out our critical life sustaining mission.

Question. Of these requested five new positions, what are the two most urgently required, and what would be the job titles and responsibilities of these new personnel? What level of increased funding would be associated with these two positions for six months?

Answer. All of the positions are most urgently needed to provide readiness capability for the American people. However, if OET were forced to select the two most critical positions necessary for restoring the flow of life sustaining supplies and commerce, then the choice would be the Regional Emergency Transportation Manager (GS–15) and the Operations Chief (GS–13/14).

—*Regional Emergency Transportation Manager*.—Extensive technical expertise in transportation emergency preparedness planning, response and management are required for this position. The manager would develop a stronger tie between headquarters and the regions concerning the functions performed in the regions in support of disaster response. This manager would establish guidelines to assure parallel regional structures and systems while recognizing geographical differences, manage the regional training program, and develop con-

tinuity of operations (COOP) plans since most response activities occur at regional level. He or she would work closely with State and local agencies to ensure their participation in the transportation planning and response efforts. Due to the nature of the COOP work, a Top Secret clearance is required. When natural disasters occur, this manager would provide high-level coordination.

—*Operations Chief.*—This position would function as the lead policy individual on the processes and procedures utilized in a crisis environment. The Operations Chief would lead activations at headquarters and the COOP site response centers during crisis situations. It would be his or her responsibility to ensure that emergency plans and response staffing plans are current and ready to use and the individuals are trained. The Operations Chief must coordinate with other Federal departments and agencies and the DOT 24-hour Operations Centers. To do this, extensive education, experience and training are required. This individual will maintain and operate the classified data systems used within the office. A Top Secret clearance is required due to the nature of the work to be performed on a daily basis.

We have requested $132,000 for both positions, which would fund personnel compensation and benefits for one-half of the fiscal year for each position. That level of funding would also allow us to establish a work station (systems furniture, computers, phones, etc.), for each employee.

Question. How many times in fiscal year 1999 was the Center activated and for what reasons? How many times thus far in fiscal year 2000 has the Center been activated and for which reasons?

Answer. Any time a major incident occurs that disrupts the transportation infrastructure, usually without advance notice, DOT either partially or fully activates the DOT Crisis Management Center (CMC). In 1999, the DOT Center was used at least a dozen times for natural disasters including:

—flooding in Virginia,
—tornadoes in Arizona,
—Hurricane Floyd,
—winter storms in the Pacific Northwest,
—blizzards in the Midwest and the Northeast,
—severe cold weather in Alaska,
—winter storms in New York,
—the District of Columbia snow storm,
—Texas flooding, and o landslides in Idaho.

The center was also activated for one special event: the NATO Anniversary held in Washington, DC. It was also activated to serve as the Department's clearing house for the Y2K rollover and earlier in the year for the Julian Calendar rollover on April 9, 1999.

Thus far in 2000, the center has been activated 24 hours a day for several days during the Y2K rollover event and the leap year rollover event. We plan to activate the center this Spring for a major National Security Exercise.

We use the CMC daily. The Office of Emergency Transportation staff researches information about ongoing disasters across the globe that may impact the transportation system. Staff members prepare reports and maintain communications with other Federal and State emergency operations centers. They also use the CMC to provide readiness training to Departmental and other Federal response personnel on a recurring basis.

Question. For the Crisis Response Management program, please provide a breakdown of how the fiscal year 1999 and fiscal year 2000 funds were or willbe used.Answer.

Fiscal year 1999	Appropriation/Obligation
Contract Program: Crisis Response Mgmt	[1] $450,000/[2] $397,000

[1] Include $250,000 for Y2K supplemental.
[2] Balance of funding was carried over to fiscal year 2000.

Funds were used for developing regional and headquarters training, assisting the RETCOs as possible in the conduct of their program operations, internal contracts for software support contracting, and contracting for maintenance support in the Crisis Management Center.

Fiscal year 1999	Appropriation/Obligation
Contract Program: Crisis Response Mgmt	[1] $280,000/$323,000

[1] Estimated obligations; includes unobligated balance from Y2K fiscal year 1999 supplemental.

Fiscal year 2000 funding is for developing and conducting response team training at headquarters and in the regions, for limited support to the RETCO program, contract support for software systems, Crisis Management Center maintenance and contracting, Continuity of Operations (COOP) startup costs for the installation of a building access ramp ($55,000) at the DOT relocation site, and for minimal equipment ($25,000) for the relocation site.

PROGRAM SUPPORT

Question. Where is the Transportation Safety Institute? How many personnel work there? Are these RSPA employees? How is the Institute funded?

Answer. The Transportation Safety Institute (TSI) has two campuses in Oklahoma City, with the main campus located at the Mike Monroney Aeronautical Center, and the North Campus facility located at 4400 Will Rogers Parkway. Currently 56 Federal employees work at TSI, 10 of which are Coast Guard Container Inspection Training and Assistance Team positions, and 1 is a detailed position from Office of Pipeline Safety. Two of the positions (Director and Office Administrator) are RSPA employees.

TSI is funded and staffed with resources provided from sponsoring Federal Agencies through reimbursable agreements. TSI also receives funding from private companies who wish to have safety training, such as pipeline and hazardous materials safety training, provided for their employees. Sponsor costs are reduced by tuition and user fees charged to non-sponsor participants, such as international students, and state, industry, and local government students who fill available classroom slots, as permitted under specific legislative authority.

Question. Please explain the proposed move of 2 FTE associated with the Transportation Safety Institute from the Research and Technology budget to Program Support. How much of the increased request for Program Support PC&B is associated with the proposed transfer of two Transportation Safety Institute FTE?

Answer. The proposed move of two FTE associated with the Transportation Safety Institute from the Research and Technology budget to Program Support is due solely to the Secretary's reorganization of the Research and Special Programs Administration. The increased request for Program Support PC&B associated with the proposed transfer of two Transportation Safety Institute FTE is $200,000.

Question. Department-wide, how much was allocated for the Garrett A. Morgan Technologies and Transportation Futures Program during fiscal year 2000 and how much will be allocated during fiscal year 2001? Please specify the exact source of those funds.

Answer.

[The information follows:]

GARRETT A. MORGAN TECHNOLOGY & TRANSPORTATION FUTURES PROGRAM

[In thousands of dollars]

Operating Administration/Account	Fiscal year	
	2000	2001
USCG: General Operations	$100	.....
FAA: General Operations	50	.....
FHWA: Highway Trust Fund	.....	$688
RSPA: RSP/Program Support	.....	200

In fiscal year 2000, USCG and FAA were the sole sources of funding for RSPA's Garrett A. Morgan Technologies and Transportation Futures Program.

Question. What different functions does the new "business modernization" program perform that are not met by the "information resource management" program? Between these two programs, the fiscal year 2001 budget request is almost $1,000,000 higher than the enacted fiscal year 2000 funding level. If you got half the increase you requested in these programs, what could be accomplished in fiscal year 2001, and what would need to be deferred?

Answer. The Information Resource Management (IRM) Program allows RSPA to meet existing program office needs that translate into achievement of the goals and activities in DOT's and RSPA's Strategic Plans. The IRM Program request will ensure that we are able to provide the systems, support and maintenance for RSPA's current electronic infrastructure and automated business functions needed to provide the public with hazardous materials safety, environmental protection, mobility, national security and research and education.

The IRM program cannot support new initiatives. Business Modernization is a major new initiative envisioned to change the basic way RSPA will do business in a digitized government. RSPA needs additional resources to accelerate the evaluation of its systems and to automate additional business processes that make sense. Finding appropriate automation tools to leverage technology across such a diverse agency is a key challenge. Such automation is necessary to accomplish more with less tomorrow and to achieve RSPA's customer service goals.

Partial funding of half of the request would drastically narrow the focus of the Modernization Program. RSPA would be able to meet its DOT Wide Initiatives and with the Wide Area Network (WAN) Initiative improve electronic communications and performance to the RSPA regional offices.

Deferral of investments to Infrastructure and Programmatic Operations will not enable RSPA to keep pace with the technological development of its stakeholders, Government partners, and the public. Without the new and expanded systems RSPA will lose the capability to significantly improve data and information exchange and the analysis supporting regulatory decisions. The lack of these investments will deny RSPA the opportunity to maintain its oversight and regulatory effort in the face of the growth in industries regulated in RSPA's hazardous materials and pipeline programs. Ultimately, it would undermine RSPA's ability to achieve its mission of transportation safety, emergency response, and the development and dissemination of research and technology.

Question. Please specify what employee development activities have been accomplished in fiscal years 1999 and thus far in fiscal year 2000. How has RSPA paid for these activities? What planned activities would be undertaken with the new $327,000 employment development program?

Answer. From fiscal year 1999 until now technical training was provided to employees who oversee hazardous materials transportation, pipeline safety, advanced technology research, and national mobility/security. This is critical training for employees in technical fields who require an understanding and expertise in industrial processes and techniques such as organic and physical chemistry, blasting and explosives, welding inspection for pipelines and pipeline inspections using intelligent pigs. This mission related training consumes the majority of our budget. In fiscal year 1999, we recognized the need to develop our staff's management competencies and were able to complete management development training.

Administrative training (i.e., acquisition, budget, accounting, human resources, diversity, etc.) including soft skills and basic education training (i.e., writing, English and grammar, time management, project management, communications skills, etc.) is only accomplished once technical training needs are met. Creating a digital government requires the Research and Special Program Administration to develop and maintain a computer literate population. We were able to accomplish limited training in this area during fiscal year 1999 and fiscal year 2000. RSPA is experiencing nearly full staffing levels, which makes alternate funding sources unavailable in fiscal year 2001.

The additional funding will provide for continuous learning especially critical in technological fields such as those that RSPA's employees oversee in the fields of hazardous materials transportation, pipeline safety, advanced technology research and national mobility/security. RSPA's technical workforce needs frequent re-training in industrial processes and techniques merely to keep pace with technological changes in the industries that it regulates.

Present day standard office technology, procedures and practices require us to stay abreast of current trends and technology. We plan to train existing employees in 21st century business processes and innovations to increase their productivity, efficiency, and customer service skills.

We anticipate using the additional fiscal year 2001 training funds for customer service training. Based on the results of a National Performance Review survey, the Department of Transportation plans to ear mark customer service training as a high priority.

We plan to make greater use of distance learning technology, as directed by Executive Order 13111 "Using Learning Technology to Improve Training Opportunities for Federal Employees", to provide the highest quality and most efficient training opportunities possible to our employees.

The Secretary of Transportation's Workforce Planning Initiative directs us to analyze and identify our workforce skills requirements through fiscal year 2002, and to develop a strategy to maximize the extent to which critical skills needs can be filled internally. The additional funding will enable us to retrain employees in order to fill skill gaps and build talents pools to meet future organization's needs.

Executive and management training, new skills requirements, greater use of distance learning technology, workforce planning strategies, and identified gaps in traditional skills all underscore the need within RSPA for increased learning and development funding.

EMERGENCY PREPAREDNESS GRANTS

Question. Please prepare a table showing the amount allocated to each of the states for each of the last three years and display the increase that would be provided if the full request was allowed.

Answer. The following table is provided:

STATES	ACTUAL ALLOCATIONS FISCAL YEAR 1997	1998	1999	FULL-FUNDING FISCAL YEAR 2000	INCREASE 1999–2000
ALABAMA	$117,942	$117,942	$158,656	$234,957	$76,301
ALASKA	41,180	41,180	55,396	81,870	26,474
ARIZONA	81,763	81,763	109,987	163,390	53,403
ARKANSAS	72,907	72,907	98,074	145,952	47,878
CALIFORNIA	485,207	485,207	652,701	968,081	315,380
COLORADO	83,356	83,356	112,131	166,906	54,775
CONNECTICUT	75,144	75,144	101,084	150,041	48,957
DELAWARE	44,913	44,913	60,418	89,190	28,772
DISTRICT OF COLUMBIA	37,448	37,448	50,374	74,421	24,047
FLORIDA	216,353	216,353	291,039	432,317	141,278
GEORGIA	142,701	142,701	191,961	285,628	93,667
HAWAII	44,789	44,789	60,250	89,045	28,795
IDAHO	58,847	58,847	79,161	117,496	38,335
ILLINOIS	316,505	316,505	425,763	627,683	201,920
INDIANA	152,033	152,033	204,516	302,308	97,792
IOWA	104,755	104,755	140,917	208,943	68,026
KANSAS	117,072	117,072	157,486	233,105	75,619
KENTUCKY	90,198	90,198	121,334	180,362	59,028
LOUISIANA	103,884	103,884	139,745	207,412	67,667
MAINE	53,871	53,871	72,468	107,180	34,712
MARYLAND	94,179	94,179	126,690	187,905	61,215
MASSACHUSETTS	108,362	108,362	145,769	216,762	70,993
MICHIGAN	169,076	169,076	227,442	338,439	110,997
MINNESOTA	129,639	129,639	174,391	258,659	84,268
MISSISSIPPI	88,831	88,831	119,496	176,963	57,467
MISSOURI	134,987	134,987	181,584	269,925	88,341
MONTANA	58,847	58,847	79,161	117,561	38,400
NEBRASKA	92,313	92,313	124,179	183,468	59,289
NEVADA	58,723	58,723	78,995	117,030	38,035
NEW HAMPSHIRE	52,252	52,252	70,290	103,807	33,517
NEW JERSEY	155,142	155,142	208,697	311,035	102,338
NEW MEXICO	73,776	73,776	99,244	146,658	47,414
NEW YORK	252,183	252,183	339,237	505,572	166,335
N. CAROLINA	151,533	151,533	203,843	302,243	98,400
N. DAKOTA	77,385	77,385	104,099	153,727	49,628
OHIO	264,376	264,376	355,639	525,378	169,739
OKLAHOMA	94,553	94,553	127,193	189,247	62,054
OREGON	91,941	91,941	123,679	183,750	60,071
PENNSYLVANIA	210,132	210,132	282,670	420,164	137,494
RHODE ISLAND	.....	46,281	62,257	92,064	29,807
S. CAROLINA	91,692	91,692	123,344	183,137	59,793

STATES	ACTUAL ALLOCATIONS FISCAL YEAR 1997	1998	1999	FULL-FUNDING FISCAL YEAR 2000	INCREASE 1999–2000
S. DAKOTA	61,708	61,708	83,010	123,089	40,079
TENNESSEE	123,044	123,044	165,519	245,487	79,968
TEXAS	321,605	321,605	432,624	644,428	211,804
UTAH	70,169	70,169	94,392	139,661	45,269
VERMONT	41,927	41,927	56,401	83,387	26,986
VIRGINIA	121,177	121,177	163,008	241,893	78,885
WASHINGTON	99,033	99,033	133,219	198,471	65,252
WEST VIRGINIA	71,786	71,786	96,567	142,641	46,074
WISCONSIN	129,761	129,761	174,554	259,057	84,503
WYOMING	49,890	49,890	67,112	99,313	32,201
TOTAL	5,980,890	6,027,171	8,107,766	12,027,208	3,919,442

Question. How will the final regulation on registration fees influence fee collection for the next two years? How does this rulemaking influence the need for appropriated funds?

Answer. RSPA expects that under the revised registration regulations, approximately 45,000 companies will be required to register and that the grant program monies collected will be sufficient to fund that program at the $14.3 million level reflected in the Department's fiscal year 2000 budget. The increase in the amounts collected under the revised registration requirements will be used to increase the training and planning grants. All other program funding levels will remain consistent with needs established in previous years.

Question. What would be the result if, for fiscal year 2001, the Appropriations Committees reinstated the obligation ceiling for emergency preparedness grants at $7,500,000? How would the excess collections above the obligation ceiling be treated? Would the hazardous materials registration rulemaking be revised?

Answer. RSPA would distribute grant program funds up to the ceiling. All funds collected above any Congressionally-mandated ceiling would be held in the Emergency Preparedness Fund for distribution during the following year's grant cycle. An obligation ceiling on current year authority would not impact the need to collect funds for mandatory authority for the program in the future.

Question. Has RSPA performed any specific analysis to justify the expansion of the HMEP program as proposed in its February 14, 2000 rule? If so, please summarize this analysis and your findings. Does the analysis include an assessment of the role of privately funded, locally funded, and state-funded hazardous materials emergency response training?

Answer. The final rule published on February 14, 2000 was supported by a Final Regulatory Evaluation that considered five regulatory alternatives, including: (1) do nothing; (2) expand base of persons required to register and adopt a two-tier fee schedule ($300 & $2,000); (3) raise the flat fee for all persons currently required to register ($575); (4) expand base of persons required to register and increase the flat fee ($360); and (5) adopt a two-tier fee schedule for all persons currently required to register ($300 & $5,000). Our evaluation found:

—the average annual level of funding (approximately $6.4 million) of the HMEP program is approximately 50 percent of that authorized by the Congress.

—40 percent ($2.56 million) of grant funds allocated for emergency preparedness planning purposes goes to support activities of the more than 3,000 Local Emergency Planning Committees throughout the nation.

—60 percent ($3.84 million) of grant funds allocated for emergency preparedness training purposes goes to support activities of the nation's more than 2 million emergency responders (250,000 paid firefighters, 800,000 volunteer firefighters, 725,000 law enforcement officers, and 500,000 emergency medical services providers).

—approximately 800,000 shipments of hazardous materials make their way through the national transportation system each day.

—the potential threats posed by the transportation of hazardous materials require the development of emergency plans and training of emergency responders to the full extent authorized by law.

RSPA's analysis did not include an assessment of the role of privately funded programs for hazardous materials emergency response training, but did include some discussion of state-funded hazardous materials emergency response training.

OFFICE OF PIPELINE SAFETY (OPS) THREE YEAR FUNDING

Question. What activities can be funded with the monies that are available for three years?

Answer. Three year funding availability is requested in our fiscal year 2001 President's Budget as follows. We have indicated the funding sources and note that an activity may be funded by more than one source (e.g., State Pipeline Safety Grants).

Fiscal Year 2001 President's Budget

Program Activity	*Amount*
Trust Fund Share of Pipeline Safety:	
Operating Expenses:	
Personnel Compensation & Benefits	$275,000
Administrative Expenses	45,000
Contract Programs:	
Information & Analysis	400,000
Risk Assessment & Technical Studies	400,000
Compliance	100,000
Training & Information Dissemination	100,000
OPA: Implementing the Oil Pollution Act	2,443,000
Grants: State Pipeline Safety Grants	500,000
Total	4,263,000
Pipeline Safety Fund:	
Research and Development:	
Information Systems	400,000
Risk Assessment	300,000
Mapping	800,000
Outside Force Damage	644,000
Total	2,144,000
Grants:	
State Pipeline Safety Grants	17,019,000
Risk Grants	500,000
One-Call Grants	1,000,000
Damage Prevention Grants	5,000,000
Total	23,569,000

OPS UNOBLIGATED BALANCES

Question. What are the current unobligated balances in the various sub accounts in the appropriation for the OPS? What amount will be unobligated at the end of fiscal year 2000? Will any unobligated funds be returned to the pipeline safety fund?

Answer. As of March 21, 2000, the total unobligated balance for the Office of Pipeline Safety was $17.73 million. This includes $.458 million for operation expenses; $.273 million for contract program activities (one year funds); $2 million for R&D program activities (three year funds); and $15 million for grants. We plan to obligate all contract program and grant funding by close of fiscal year 2000. We estimate that our 3-year funding that was enacted in fiscal year 2000 for R&D will have an unobligated balance of approximately $600,000 at the end of fiscal year 2000. At this time, we are estimating a lapse of less than $100,000 of one year operating expenses. Unobligated "one-year" funds for a given fiscal year are returned to the Pipeline Safety Fund 5 years after the close of the fiscal year in which they were appropriated.

REGULATIONS IMPACTING WORKLOAD

Question. How will the forthcoming pipeline integrity regulations affect the OPS workload? How does the fiscal year 2001 budget request account for those expected impacts on OPS? How will this new regulatory requirement impact the workload of the OPS over the longer term?

Answer. We are currently analyzing the workload impact of these regulations, but we do expect that they will present sizeable challenges to OPS. In fiscal year 2000–2001, the impacts are primarily in areas of regulatory and standards development. The four new technical experts requested in fiscal year 2001 will help OPS develop the compliance strategy and audit process for the integrity regulation that we will implement in fiscal year 2002. We will begin training our inspection personnel on the audit process we will use to review the adequacy of internal inspection, hydrotesting, and analysis in fiscal year 2001. We will use funds derived from the Risk Assessment and Technical Studies account.

The fiscal year 2001 budget request does not account for the majority of these integrity rule impacts as the largest workload will begin in fiscal year 2002 with the review of operator-developed assessment plans. We are currently working to define workload needs and identify the appropriate mix between contractual and permanent staff to efficiently and effectively carry out the associated responsibilities.

OPS STAFFING LEVELS

Question. Please provide a breakout of the current staffing levels in OPS headquarters and the five regional offices. Are all 105 funded positions currently filled? If not, where are the vacancies?

Answer. The following table is provided:

OFFICE OF PIPELINE SAFETY STAFFING LEVELS

Office	Authorized	Onboard	Vacant
Headquarters	39	38	1
Eastern	10	10	.....
Southern	10	10	.....
Central	14	12	2
Southwest	13	12	1
Western	15	15	.....
TSI	4	4	.....
Total	105	101	4

PIPELINE SAFETY RESERVE FUND

Question. Please prepare a comparative historical table displaying the per mile user fee assessed to gas transmission and liquid pipeline operators, and the total collected in user fees from each industry in fiscal years 1997 through 1999 and anticipated for fiscal year 2000.

Answer. A table follows which shows the per mile rate and the total collections for fiscal years 1997 through 1999. We are currently collecting fiscal year 2000 user fees; therefore, the amounts shown below indicate the assessment made to the gas and liquid operators. We estimated the fiscal year 2000 figures based on the amount of $30,612,888.65. This includes the President's Budget Request for the Pipeline Safety Program of $36,879,000, less funds derived from the Oil Spill Liability Trust Fund of $5,479,000 and $1.4 million derived from existing user fees, plus an offset to the Research and Special Programs Appropriation for labor costs to support the Pipeline Safety Program. Other variables include the offset from previous year collections. The law allows RSPA to collect 105 percent of the appropriation.

1997–1999 PER MILE RATE/TOTAL COLLECTIONS

	Per Mile Rate	Total collected
Gas transmission:		
Fiscal year:		
1997	$67.48	$18,927,000
1998	67.98	20,050,437
1999	70.47	20,725,337
2000	68.23	[1] 20,458,589

1997–1999 PER MILE RATE/TOTAL COLLECTIONS—Continued

	Per Mile Rate	Total collected
Liquid:		
Fiscal year:		
1997	61.27	8,869,716
1998	59.59	8,864,335
1999	57.88	9,102,548
2000	63.11	[1] 9,761,800

[1] Fiscal year 2000 based on assessment.

Question. How did you allocate the user fee between gas transmission lines and product lines for each of the last two fiscal years? Does this accurately reflect the true allocation of your efforts and resources? Please document your answer.

Answer. In fiscal year 1999 and fiscal year 2000, RSPA charged gas operators 55 percent of program costs and 87 percent of grants. We charged liquid operators 45 percent of program costs and 13 percent of grants. These percentages closely reflect the allocation of our efforts and resources, as shown in the table that follows:

Program Activity	Fiscal year	
	1999 Gas/ Liquid	2000 Gas/ Liquid
PC&B [1] for the Inspectors (Regions)	50/50	50/50
PC&B for HQ personnel	67/33	60/40
Administration	50/50	50/50
Information and Analysis	50/50	50/50
Risk Assessment & Technical Studies	50/50	50/50
Compliance	50/50	50/50
Training & Information Dissemination	75/25	75/25
Emergency Response (NRC)	50/50	50/50
Public Education Campaign (One-call)	50/50	50/50
Research & Development	50/50	50/50
Average Apportionment	54/47	54/47
Actual Apportionment	55/45	55/45
Grants	87/13	87/13

[1] Personnel, Compensation & Benefits.

Question. Please justify in detail why OPS maintains it needs to always have at least $11 million in the Pipeline Safety fund. Please break down how that amount was determined.

Answer. RSPA recently re-evaluated the amount needed to sustain the pipeline program until fees could be collected. We looked at obligations for the first and second quarters and determined that, on average, OPS spends about 34 percent of its appropriation. In prior fiscal years 34 percent amounted to approximately $11 million. For fiscal year 2001, 34 percent amounts to approximately $15–$16 million. Currently, user fees are collected in the later part of the second quarter (late March). March is the soonest we can expect to collect fees, with a billing cycle that starts after we receive our enacted appropriation in October, calculate rates for each operator, and issue assessments.

Question. What is the current balance in the pipeline safety reserve fund? Please provide an historical table displaying the annual unappropriated balance in the fund from the end of fiscal year 1998 through fiscal year 2000 with an estimated level for fiscal year 2001, assuming your full request were approved. Please describe how much of the unobligated balance could safely be drawn down taking into account replenishment of the fund through the collection of new fees.

Answer. The current balance in the Pipeline Safety (reserve) Fund as of March 5, 2000, was $15,461,000 million. The historical table requested is provided as follows:

UNAVAILABLE COLLECTIONS

[In thousands of dollars]

		Fiscal year			
		1998 actual	1999 actual	2000 enacted	2001 request
01.00	Balance, start of year	17,354	18,490	17,738	16,338
02.00	Receipts	28,964	30,228	30,447	43,519
04.00	Total: Balances and collections	46,318	48,718	48,185	59,857
05.00	Pipeline safety appropriation	−29,421	−30,158	−31,202	−42,874
	Research and Special Programs	−574	−574	−645	−645
05.99	Total appropriations	−29,995	−30,732	−31,847	−43,519
06.10	Unobligated balance returned to receipts	354	234	.....	.....
06.50	Other adjustments	71	−482	.....	.....
07.99	Balance, end of year	16,748	17,735	16,338	16,338

We need a balance in the fund sufficient to sustain OPS operations through the second quarter when we collect user fees to replenish the fund. Based on our rate of outlays for salaries, contracts and other operating and administrative expenses, we estimate that about 34 percent of appropriated funds would be sufficient to sustain us. For fiscal year 2001, 34 percent amounts to approximately $15–16 million.

Question. What has been the lowest balance that has been in the Pipeline Safety Fund for each of the last 20 months? What was the amount withdrawn from the Pipeline Safety Fund during each of the last 20 months?

Answer. The net balance in the Pipeline Safety Fund is determined at the end of each month. It is not calculated daily, therefore, we are unable to provide the lowest monthly balance for each month. The lowest balance during fiscal year 1999 was in April 1999 in the amount of $15,410.796. The lowest balance during fiscal year 2000 was in October and November in the amount of $16,014,711. The withdrawal of monies from the Pipeline Safety Fund for fiscal year 1999 amounted to $30,974,000 (requested in April 1999), and $17,394,000 in fiscal year 2000 was withdrawn in February.

Question. Please recalculate the minimum dollar amount that should be retained in the pipeline safety fund balance in order to maintain the integrity of the pipeline safety program. What is the justification for the recalculated amount?

Answer. We believe that $15-$16 million should be retained in the Pipeline Safety Fund in order to maintain the integrity of the pipeline safety program. We issue assessments in mid-December and receive collections by late March to replenish the Pipeline Safety Fund. Several years ago, we looked at OPS obligations during the first and second quarters and determined that, on average, OPS spends about 34 percent of its appropriation before the fund is replenished. In prior fiscal years, 34 percent amounted to approximately $11 million. For fiscal year 2001, 34 percent amounts to approximately $15–$16 million.

Question. How could the billing and collection cycle be changed to decrease this minimum reserve amount? Could RSPA initiate a rulemaking that would make all fees due by the beginning of the federal fiscal year, to optimize the full and efficient use of Pipeline Safety Fund receipts?

Answer. RSPA changed the billing cycle in 1996, and issued user fees in the first quarter of the fiscal year (mid-December). User fees are based on the fiscal appropriation which is usually enacted on or about October 1. RSPA cannot assess fees in advance of this appropriation and it would be difficult to calculate the amounts due and issue bills much in advance of December.

OIL POLLUTION ACT EXPENSES AND OIL PIPELINES

Question. Please specify and describe all OPS expenses that legally could be associated with the Oil Pollution Act (OPA) in fiscal year 2001. What types of personnel related costs can be associated with OSLTF funds, and what is the maximum level

of personnel costs under the current budget request that could be funded in this manner.

Answer. We estimate that the total amount that could legally be associated with Oil Pollution Act program requirements is $11,473,000. We estimate that this amount, described as follows, will ensure that activities, including personnel costs, that directly relate to preventing and mitigating the effects of oil spills into water and environmentally sensitive areas are funded by the appropriate source (OSLTF).

—PC&B and Administrative ($1,056,000): OPS HQ and Region staff and administrative costs to address environmental policy, regulatory development, spill response plan review & exercise, pipeline inspection & spill response technical monitoring; special task force/studies of oil pipeline company risk management programs &

Over 360 hazardous liquid inspections, includes accident investigations and pipeline construction.

3 area exercises and 20 table top drills.

—Information and Analysis ($700,000): Over half the incident reporting, data collection, analysis and trending labor.

Identifying accident cause and consequence, evaluating and acting on environmental impacts, particularly related to protecting drinking water sources.

—Risk Assessment and Technical Studies ($650,000): Systematically identify hazardous liquid risks, and compare relative likelihood and consequences of an adverse events.

Monitor, report, and expand the Risk Demonstration and System Integrity Inspection Pilot programs.

Increase public awareness about potential risks from liquid pipelines.

—Compliance ($150,000): Technical field engineering support for monitoring major spills and remediation.

Dedicated personnel for integrating public and private sector incident coordination and decision support for protective actions.

—Training & Information Dissemination ($400,000): Computer-based training (CBT) to update safety evaluations of hazardous liquid pipeline systems.

Classes and seminars specifically given to address hazardous liquid risk and system integrity concerns.

—Emergency Notification ($50,000): The National Response Center (NRC) provides immediate notification of hazardous liquid pipeline spills.

—Damage Prevention/Public Education Campaign ($200,000): Investigate, encourage, and inform communities on damage prevention efforts on hazardous liquid pipelines.

—Implementation of the Oil Pollution Act ($2,443,000): Review and approve pipeline operator spill response plans.

Contract support for 3 area exercises and 20 table top drills.

Obtain data on environmental sensitive area, includes drinking water and other ecological resource areas.

—National Pipeline Mapping System ($400,000): Collecting and digitizing more accurate liquid pipeline location information as it becomes avail-able. To be used in conjunction with data on population, drinking water intakes, terrain. Needed to set priorities for prevention and response actions.

—Outside Force Damage ($400,000): Research to detect encroachment on pipeline right-of-way or mechanical damage to reduce accidents from third-party damage to hazardous liquid pipelines.

—Pipeline Safety Grants ($5,024,000): State program which provides oversight of intrastate hazardous pipelines operations and maintenance, construction, repairs.

50 percent of one-call grants to states for programs to increase training, education and compliance activities.

—50 percent of damage prevention grants to reduce impacts on the environment from disruptions caused by excavation activities around railroads, sewage lines, electric, telecommunications, hazardous liquid pipelines.

Question. For fiscal year 2000 and fiscal year 2001, what was the Oil Spill Liability Trust Fund transfer levels requested by RSPA prior to the OMB passback?

Answer. RSPA's request for funding derived from the Oil Spill Liability Trust Fund, prior to the OMB passback, was $8,814 million in fiscal year 2000 and $4,263 million in fiscal year 2001.

ENVIRONMENTAL INDEXING

Question. Please describe progress made in the environmental indexing effort. What was accomplished with funding provided in fiscal year 1999? How much is

being spent in fiscal year 2000 for this activity, and for which purposes? What new initiatives will be conducted during fiscal year 2001 and how much will that cost?

Answer. RSPA has been working with the Environmental Protection Agency (EPA), as mandated by statute, the Departments of Interior (DOI), Agriculture (USDA), and Commerce (DOC), environmental organizations, state agencies, technical experts, and the pipeline industry to identify and locate drinking water and ecological resources that are most susceptible to a hazardous liquid release, or for which consequences would be most adverse if affected by a release.

RSPA has used fiscal year 1999 funding to pilot test a draft definition and model that identify unusually sensitive drinking water and ecological resource areas. The purpose of the pilot was to determine if the definition and model could be used to identify and locate unusually sensitive areas (USA's) using available data from government agencies and environmental organizations. Major categories in the definition include public drinking water systems, wellhead protection areas, sole source aquifers, threatened and endangered species, imperiled and critically imperiled species, depleted marine mammal habitats, and areas where a large percentage of the world's population of a species concentrates. The pilot was conducted in the States of Texas, California, and Louisiana, since these states contain approximately 45 percent of the nation's hazardous liquid pipelines and a large number of ecological and drinking water resources. In Texas, approximately 15,000 phone calls had to be made to determine if there were adequate alternative drinking water resources available. RSPA has used a portion of the fiscal year 1999 funding to gather drinking water data from state agencies which will be used once the USA definition and model are finalized. RSPA has also used a portion of the fiscal year 1999 funding to update a catalog that identifies the sources of drinking water data in all 50 states and to begin work on an ecological resource data catalog. The drinking water catalog can be found on the following RSPA Internet site: http://ops.dot.gov.

RSPA expects to spend $900,000 in fiscal year 2000 on this initiative. A portion of this funding will be used to conduct a technical review of the pilot results. RSPA, other government agencies, academia, and environmental groups are conducting a technical review to determine if the pilot results actually depict the most unusually sensitive drinking water and ecological resource areas. The definition and model will be modified, if necessary, based on the pilot and technical review results. The funding will also be used to gather and process individual state datasets needed to identify drinking water and ecological USA's. These areas will be mapped using our geographic information system (GIS) technology and added to the National Pipeline Mapping System. We will use the remainder of the fiscal year 2000 funds to work with The Nature Conservancy, Association for Biodiversity Information, and other government agencies on a national database for sensitive ecological species. All of the location data on threatened and endangered species and species at risk of global extinction are created and maintained at the state level by State Heritage Programs or State Nature Conservancies. The national database effort will gather the individual state datasets into a common and standardized database.

RSPA is requesting $900,000 in fiscal year 2001. The funding will continue our work with The Nature Conservancy, Association for Biodiversity Information, and other government agencies on a national database for sensitive ecological species, specifically to convert previously collected paper data on sensitive resources to digital data. The funding will also enable us to finish our initial mapping of drinking water and ecological USA's and to make these maps available over the Internet. The funding will also allow us to gather and process data on other resources of national importance such as cultural and recreational resources, transportation networks, historical sites, and economic areas, and to create maps of these sensitive resource areas, that we can make available over the Internet.

OIL SPILL RESPONSE PLANS/LESSONS LEARNED

Question. Please summarize the results of last year's review of pipeline operators' emergency response plans. Include the number of plans reviewed, the number accepted, and the number of plans which required corrective measures.

Answer. In fiscal year 1999, OPS reviewed 188 plans, of which 31 were new response plans and 87 were revisions to existing response plans. Of the 31 new plans we reviewed, 14 were able to be approved without requiring corrections, and 17 had at least one deficiency requiring correction. Of the 87 revisions to existing plans, 17 of them had at least one deficiency requiring correction. Under our regulations, OPS plan approvals expire every five years. Because most of the plans were initially approved in 1995, we are in the process of reviewing all of the plans again to ensure that they are still current and reflect the most current environmental and response information.

Question. Please discuss the amount of funds spent or planned to be spent on spill response exercises during each of the last three years. Given the lessons learned and the practice gained from past simulations, why couldn't the number of drills be reduced during fiscal year 2001?

Answer. In fiscal year 1997, OPS spent $443,000 on spill response exercises, $567,000 in fiscal year 1998, and $306,981 in fiscal year 1999. These amounts include contractor support for exercise design, conduct, and evaluation. These figures also include an estimated $15,000 per year for travel costs of OPS staff to participate in exercises.

We expect to spend $450,000 on exercises in both fiscal year 2000 and in fiscal year 2001. This will fund approximately 20 tabletop exercises and at least 2 large scale area exercises. The value of conducting exercises is evident in the improvement of the pipeline industry's spill response capabilities. In addition, Federal, state, and local environmental and emergency response agencies improve their actual spill response by streamlining communications and increasing efficiency in command & control actions.

In the future, OPS is considering changing the exercise program mix by conducting more large-scale field exercises and perhaps fewer tabletop exercises. The exercises we conduct each year are a representative sample of the 1,400 facility response plans for facilities under our jurisdiction. We select operators based on risk factors, as identified in our review of their response plans and as suggested by our OPS regional staff. Until we reach a point of diminishing returns, it would be premature to begin reducing our exercise program.

Question. How are the lessons learned from both the actual releases and drills reflected in changes in the OPS program?

Answer. The OPA 1990 exercise program started out with fairly elementary table top and area drills in fiscal year 1997. Three years later, the drills have resulted in lessons learned about how to improve communications, command and control efficiency, and how to protect environmentally sensitive areas. Perhaps the most valuable aspect of the exercise program is that it allows emergency responders from industry, Federal, State, and local agencies to familiarize themselves with each other's procedures and priorities before an actual spill.

When we examined the exercise evaluation reports and after-action reports from actual spills, we drew the following conclusions. Most operators understand and use unified and incident command but could hone these skills with more practice. Operators need to update their notification lists more often and to strengthen their staffing practices. Operators need to ensure that they have enough containment, recovery, and temporary storage equipment available response in remote inland areas.

We are taking steps to strengthen our exercise program. We have implemented a quantitative, risk-based exercise selection methodology. This ensures that we exercise operators that carry products in a wide range of operating conditions and that range in size and in the environmentally sensitive areas the pipelines cross. We are making exercises more realistic by using maps showing sensitive areas and spill trajectories. We are also asking our facilitators to ask tough questions and to challenge assumptions about response capabilities.

ALYESKA—MEMORANDUM OF AGREEMENT

Question. Please update us on the implementation of the Alyeska memorandum of agreement regarding valves and corrosion. Are there any new issues in this area and how are those being addressed?

Answer. The Office of Pipeline Safety (OPS) continues to work with Alyeska to address the items outlined in the memorandum of agreement in addition to other safety issues. Following is a status update on the corrosion coupon monitoring program, the corrosion mitigation project for transition joints, the mainline valve program and our enforcement action against Alyeska for overpressure events on the pipeline.

Coupon Monitoring Program: In March 1996, Alyeska began a long-term, comprehensive study to specifically determine if corrosion coupons could be used to evaluate cathodic protection on the large diameter Trans Alaska pipeline system (TAPS). The results of the study indicate that, although corrosion coupons represent an important contributor to the monitoring of the cathodic protection system on TAPS, they cannot be used as a stand-alone method for determining adequate cathodic protection. However, coupons may be used in conjunction with other acceptable engineering practices such as internal inspection tools, close interval surveys, and local knowledge of environmental conditions.

On February 14, 2000, OPS conditionally approved Alyeska's Corrosion Control Management Program (CCMP). Final approval is pending the Joint Pipeline Office

(JPO) and OPS satisfaction with CCMP implementation plan. OPS believes that the CCMP, when properly implemented to meet regulatory and safety requirements, provides a methodology for corrosion control on TAPS that will result in a level of protection equal to or better than could be achieved through reliance on single stand-alone method of cathodic protection monitoring. Based on this and other information, OPS also modified an existing waiver on TAPS to allow Alyeska to run an internal inspection device on a 3-year rather than annual cycle. As a result of the CCMP pending approval, OPS is working towards closing out the 1996 coupon agreement and the 1992 TAPS monitoring report.

Corrosion at Transition Joints: Alyeska continues to work toward meeting an OPS order to evaluate and, if necessary, repair all aboveground fiberglass coating at transition joints to ensure that water does not penetrate the external pipeline coating. The fiberglass coating helps prevent corrosion where the pipeline transitions from belowground to aboveground. This action was supported by reports of corrosion at several of the transition areas.

Mainline Valve Program: We continue to closely monitor Alyeska's maintenance of the large mainline valves used to shut off the pipeline if an accident occurs. In 1995, we became concerned that many of these valves did not seal properly and initiated action to assure that public safety and the environment were not placed at risk. In 1996, Alyeska began a system-wide review of these valves and in January 1997, agreed with the Joint Pipeline Office on a plan for assessment of valves on the TAPS. During 1997, Alyeska conducted a risk assessment on mainline valves in order to prioritize these mainline valves for testing, and to establish performance standards for internal leak through. One-hundred-and-fifty mainline valves have been tested. The remaining 22 valves will be tested during 2000.

Alyeska is in the process of rehabilitating or replacing many of its valves. One remote gate valve in an environmentally sensitive area near the Yukon River was replaced in 1999. Alyeska has revised its valve testing, repair and maintenance program. The program now provides for extensive maintenance and testing beyond what is required by the pipeline safety regulations.

Overpressure of the Pipeline: We have taken enforcement action, including a civil penalty assessment, against Alyeska following a recent overpressure of pipeline facilities. This latest overpressure event occurred after Alyeska was ordered to take corrective action to prevent future overpressure of the pipeline. These actions were to include SCADA system examination and adjustment, evaluation of the pipeline control system and personnel training. OPS is reviewing Alyeska's compliance with the order.

RISK ASSESSMENT AND TECHNICAL STUDIES

Question. Please assess the effectiveness and utility of the System Integrity Inspection Program. How many companies have participated? What are the remaining challenges? How does this program fit into the more conventional inspection process?

Answer. The System Integrity Inspection (SII) program requires compliance with regulations; only the OPS approach to inspection is changing. OPS and the SII participants are reviewing a broad set of system-wide safety and integrity issues, instead of the standard regulatory compliance inspection. The SII inspections focus on areas of greatest risk so that OPS and operators can work together to find and fix problems related to significant risk at the earliest possible stage. The system-wide focus ensures that not only individual fixes are implemented, but also that the operator looks for analogous conditions elsewhere in their system and corrects them before problems arise. This, in effect, institutionalizes learning. As importantly, this program provides a more in-depth opportunity for enhanced communication and understanding of pipeline integrity issues between OPS and pipeline companies.

Discussions between the participants and OPS are focusing on corrosion control, hydrotesting and internal inspection, natural hazard-related issues and use of new technologies for risk identification and control. The SII allows OPS to investigate integrity-related information not normally addressed in a standard inspection and to address safety issues, like training, more systematically throughout a company's operations.

Three companies have applied for acceptance. OPS is nearing formal acceptance of two; the third only recently applied. A fourth company's application was declined because they were too small to help fully explore SII. We anticipate incorporating into our standard inspection process valuable lessons we learn as we go. We expect our experience to enrich our forthcoming rules requiring pipeline integrity management programs and mandatory compliance strategy for internal inspection on hydrotesting.

Question. Who are the current participants in pipeline risk management demonstration projects? What progress has been made in each of those projects? What challenges have been identified with the implementation of this program? Have any adverse safety or environmental impacts surfaced with any of the projects?

Answer. The Office of Pipeline Safety is submitting a report to Congress on the status, and results to date, of the Risk Management Demonstration Program shortly. This report will have detailed information on the program, its participants and their projects, programmatic challenges, as well as our assessment of the performance of both the Program and its participants.

OPS has authority to enter into 10 Risk Management Demonstration projects. The 10 companies are listed in a table that follows this reply. Each of these companies voluntarily applied for acceptance into the program. The companies were chosen by OPS because of their potential to (1) provide superior safety, environmental protection, and service reliability, and (2) help OPS test risk management systematically as a regulatory alternative. Other factors considered included operator's willingness to openly communicate with OPS and our state partners, new technologies they were willing to test, corporate commitment to their program, and their existing performance record. To date, we have formally approved the Risk Management Programs of 6 of the 10 companies; we continue to work with the remaining 4 companies.

We are actively auditing each of the approved companies against an established set of program review protocols and against the legally enforceable work orders produced upon approval of their programs. Though our auditing continues, OPS believes that each of the companies with formally approved programs, as well as several others we continue to work with, have clearly demonstrated that their management of safety and environmental protection can produce results that are superior to those of companies that merely comply with the minimum standards established by existing regulations. Each of these companies have, in concert with the OPS, sharpened the focus on the highest risks to the integrity of their pipelines, applied appropriate risk controls, and enhanced communication with affected communities.

At present, OPS believes that risk management—at least in the near term is best used in combination with, rather than as a replacement for, existing regulations. Further, our experience with systematic identification and control of risks shows that risk management is a viable consideration in development of future performance-based regulations. In fact, several OPS initiatives, as well as current and pending regulatory proposals have already begun to incorporate this lesson.

The 10 companies RSPA accepted into the Demonstration Program, and their acceptance dates, are listed as follows:

Company	Approved	Affected State(s)
Equilon	3/18/98	Colorado, Louisiana, New Mexico, Texas.
Chevron	2/17/99	Idaho, Utah.
Phillips	8/10/98	Texas.
Kinder Morgan	12/31/98	Arkansas, Colorado, Iowa, Illinois, Indiana, Kansas, Louisiana, Missouri, Nebraska, Oklahoma, Texas, Wisconsin, Wyoming.
Columbia/Columbia Gulf Transmission Company.	Candidate	Kentucky, Louisiana, Maryland, Mississippi, Pennsylvania, Tennessee, Virginia.
Enron	Candidate	Arizona, California, Colorado, New Mexico, Oklahoma, Texas.
Mobil	8/10/98	Illinois.
Duke	Candidate	Alabama, Arkansas, Illinois, Indiana, Kentucky, Louisiana, Mississippi, Missouri, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Texas, West Virginia.
Temmessee Gas/East Tennessee Natural Gas.	Candidate	Alabama, Arkansas, Connecticut, Kentucky, Louisiana, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Tennessee, Texas, Virginia, West Virginia.
Northwest	1/11/00	Colorado, Idaho, Oregon, Utah, Washington, Wyoming.

Question. Please elaborate on the specific contracts and their associated funding amounts that have been or will be let to ensure continued monitoring and progress in the risk management demonstration projects.

Answer. Contract funding to ensure continued monitoring and progress in the risk management demonstration projects is derived from the Risk Assessment and Tech-

nical Studies account. One multi-year contract covering risk management and other services was awarded to Cycla Corporation for these services in 1996. This contract ends at the end of calendar year 2000. OPS anticipates letting a follow-on contract in fiscal year 2001 to continue these vital services. Funding under the new contract in fiscal year 2001 is expected to parallel levels from fiscal year 2000. Prior obligations under this contract directly attributable to support of the risk management demonstration projects follow:

Fiscal year	
1996	$1,249,956
1997	1,069,053
1998	811,599
1999	708,346
2000	[1] 900,000

[1] Estimate.

Question. How much funding was or is associated with various demonstration projects in fiscal year 1999 and fiscal year 2000, and how much is requested for these projects in the fiscal year 2001?

Answer. Funding to directly support the various risk management demonstration projects involves personnel compensation, travel, contract support costs, and state participation grants. The state participation grants cover many risk-related activities not involved with the risk management demonstration projects. Total costs under these categories since fiscal year 1999 are itemized in the following table; fiscal year 2001 funding is expected to remain level with fiscal year 2000 except for state grants:

RISK MANAGEMENT DEMONSTRATION PROJECT FUNDING

	Fiscal year		2001 (est.)
	1999	2000 (est.)	
Federal Personnel	$393,000	$425,000	$425,000
Federal Travel	200,000	200,000	200,000
Contract Support	708,346	900,000	900,000
State Grants	100,000	100,000	50,000
Total	1,401,346	1,625,000	1,575,000

Funding requested under the Risk Assessment and Technical Studies account for fiscal year 2001 also covers continued oversight of the System Integrity Inspection program, risk and integrity management training of Federal and State inspection personnel, technical support for the Local Distribution Company risk management team, as well as needed administrative and clerical support.

In fiscal year 2001, we anticipate fewer consultation meetings and have reduced our request for state participation grant funding accordingly.

COMPLIANCE PROGRAM DATA

Question. For each of the last three fiscal years, please provide data on all enforcement actions taken by OPS, including the number of enforcement cases opened, closed, and the amount of civil penalty assessments collected. Please compare these data with the number of reportable events, number of deaths and injuries, and any other measures of pipeline safety for both hazardous liquids and gases.

Answer. The enforcement actions listed below do not reflect the actions OPS has taken to improve integrity and safety through voluntary agreements with operators. During each inspection, we discuss with operators ways to improve their operations and facilities beyond the minimum requirements through non-enforcement means, as we are able to positively impact safety performance.

Measures	Calendar year		
	1997	1998	1999
Enforcement:			
Cases Opened	179	218	89
Cases Closed	186	273	107

Measures	Calendar year		
	1997	1998	1999
Civil Penalty Assessments Collected	$228,171	$316,846	[1] $16,500
Reportable events:			
Incidents Reported	362	379	344
Deaths	11	19	21
Injuries	93	74	108
Property Damage (in millions)	$65	$104	$97

[1] This does not include civil penalties for a number of pending cases.

COMPLIANCE REINSPECTIONS

Question. How many of those companies provided with technical education were reinspected? Did you find those companies still out of compliance? If so, how many enforcement actions were taken against those companies?

Answer. We provide technical education to every operator we inspect. During exit interviews, we point out areas for improvement and probable violations. We offer technical education on resolving these issues. Forty-six of the companies that were inspected and received enforcement actions in fiscal year 1998 were inspected at different locations in their system during fiscal year 1999. Enforcement action was initiated on 10 of these companies in fiscal year 1999. However, it should be noted that the concerns found in fiscal year 1998 were not necessarily the same items found in fiscal year 1999.

OPS INSPECTOR STAFFING

Question. Please prepare an updated table indicating the number of pipeline safety inspectors on board and the number of pipeline safety inspector positions authorized for each of the last three fiscal years. Please show how the additional staff requested for fiscal year 2001 would be deployed.

Answer. RSPA will use the additional staff to help evaluate the use of new technologies which identify the early stages of pipeline damage and potentially harmful environmental conditions. A recent report from the DOT Inspector General found RSPA pipeline inspector resources inadequate for oversight tasks in numbers and qualifications. A soon-to-be-released GAO report is expected to offer similar conclusions. The additional staff will also help prepare operator compliance activities for the forthcoming rule which will require operators to perform testing and more comprehensive evaluation of the integrity of pipeline systems. This will ultimately help prevent pipeline accidents, enable early detection of pipeline damage and assure prompt and effective mitigation of the accidents we cannot prevent.

NUMBER OF INSPECTORS ONBOARD

Region	1998 [1] authorized/onboard	1999 [1] authorized/onboard	2000 [1] authorized/onboard
Eastern	8/8	8/8	8/8
Southern	8/7	8/8	8/8
Central	12/11	11/11	[2] 12/12
Southwest	11/11	12/12	11/11
Western	13/13	12/12	13/13
Total	51/50	51/51	52/52

[1] These numbers do not include the five Region Directors or headquarter inspector positions that supply technical support to all five regions. Some of the authorized inspector positions have been moved between regions and the headquarters technical support to meet risk-based needs.

[2] This includes two inspectors that we are in the process of hiring for the Central Region.

Question. How many accident investigations were conducted during each of the last three fiscal years? Please include information on the number of follow-up accident investigations and the results.

Answer.

ACCIDENT INVESTIGATIONS

	Fiscal year		
	1997	1998	1999
Number of Onsite Investigations	51	48	46
Follow-up Investigations	65	43	40
Accident Reports Generated	5	4	19

RSPA reviews each pipeline accident report to assess factors contributing to the failure and performs onsite investigation of those with national safety implications, public interest, fatalities, numerous injuries, significant property damage, or environmental impact. The dividing line between the accident investigation and the follow-on inspections is difficult to make and each may require months to complete. An example is the continuing investigation into the Olympic pipeline failure in Bellingham, Washington. Nine months after the pipeline failed, RSPA inspectors and technical staff continue to closely monitor Olympic's corrective actions and address the safety factors identified during the investigation.

We perform follow-on investigations for many of the onsite accident investigations and incorporate lessons learned into our inspection processes and regulatory initiatives. Recent accidents have highlighted the need for RSPA to conduct system-wide inspections and ensure pipeline companies are integrating data about their pipelines in order to make good preventative maintenance decisions.

Additionally, RSPA has set an aggressive schedule for implementation of integrity management regulations. We are looking at ways of increasing the capacity and capability of our field workforce to apply new technology to assess the soundness of critical segments of pipelines.

DAMAGE PREVENTION/PUBLIC EDUCATION CAMPAIGN

Question. How are you assuring that the results of the best practices study are used? What evidence do you have that those recommendations are being implemented? What are the next steps in advancing this work?

Answer. OPS is working with interstate pipeline operators to determine if operators: (1) are aware of the best practices identified in the *"Common Ground Study of One Call Systems and Damage Prevention Best Practices;"* (2) are aware of the various channels of access to the best practices on the OPS Information System; and (3) have evaluated their program against the best practices. OPS is coordinating with its state agency partners to determine the same information for intrastate pipelines.

We have been planning for implementation of a new grant program provided for in the Transportation Equity Act for the 21st Century (TEA–21) which will provide financial assistance to states to help encourage adoption of these practices. These funds will be provided to state damage prevention programs that meet certain criteria consistent with the provisions in TEA–21, which include evaluating a state's damage prevention program against the Common Ground best practices.

OPS is also currently assisting in the formation of a non-profit organization to advance damage prevention efforts consistent with the best practices and in the same spirit of cooperation resulting from the Common Ground Study. This organization will, among other things, encourage implementation of the best practices identified in the Study, and continue to identify future best practices to protect America's underground infrastructure. One of the best practices involves public education. OPS is actively working to expand use of our national Dig Safely campaign to promote public education and awareness of damage prevention programs.

Question. Please update your answer from last year regarding the production of a TV public service announcement for the national damage prevention campaign. What will the related costs be for such a PSA. Has OPS approached interested excavators and underground utility representatives about cost-sharing.

Answer. OPS is still considering production of a TV public service announcement (PSA); however, advertising agency estimates indicate that a TV PSA would cost a minimum of $50,000 and would more likely be in excess of $100,000. At this time, OPS is working with the major stakeholders in the damage prevention area to establish a private non-profit organization which would assume the work of the supporting the Dig Safely Campaign. This organization, to be funded entirely by the private sector but with staff support from OPS, is scheduled to be operating by the summer of 2000. The non-profit organization would decide if it wanted to proceed

with production of the PSA. OPS would support the public education initiatives of the non-profit organization.

Question. To date, what has been the Damage Prevention Quality Action Team's assessment of the effectiveness of its national education campaign? What improvements have been recommended?

Answer. All indications are that the campaign has been very well received. It has been endorsed by the U.S. Department of Transportation, the American Petroleum Institute, the Association of Oil Pipelines, the National Association of Regulatory Utility Commissioners, the National Telecommunications Damage Prevention Council, One Call Systems International, and Southeastern One Call Systems. Members of the Dig Safely Team have conducted thirty sessions nationwide to train one-call centers, facility operators, and others in the damage prevention community how to implement the campaign. Each organization that attends receives a detailed instruction manual and two CD ROMs with the campaign artwork. A number of one-call centers and other stake-holders have set aside their own damage prevention programs and are using the Dig Safely program exclusively. In addition, we have received many requests for the safety training video; we have exhausted our initial stock and are reproducing more videos and manuals. Southwest Bell is using the Dig Safely logo on bill inserts which will be distributed for three months across a five state area. One area of improvement is production of Spanish language materials. A translation of the manual into Spanish has been completed; we are preparing to dub the training video and to print brochures in Spanish. In addition, the files available on our web site were originally in a Macintosh format. These were converted into a PC format at the request of those interested in using the materials.

We need to continue conducting training sessions nationwide to produce more materials for distribution at permitting offices, retail outlets, equipment rental operations. At this point, the campaign has been very well received. We need to sustain its momentum until the Dig Safely message is recognized nationwide and the public reacts appropriately to the Dig Safely message.

Question. What were the accomplishments of the Team during the last year.

Answer. On June 30, 1999, the Team presented the National Dig Safely Campaign to the Secretary of Transportation, who officially launched the campaign's kickoff on a satellite broadcast. Team members have conducted 35 training sessions across the country; 5 more are scheduled in the next few months. The campaign received the official endorsement of the U.S. Department of Transportation, the American Petroleum Institute, the Association of Oil Pipelines, the National Association of Regulatory Utility Commissioners, the National Telecommunications Damage Prevention Council, One Call Systems International, and Southeastern One Call Systems. Team members have received many invitations to speak to one-call centers, facility operators, utility coordinating councils and industry groups which are interested in adopting the campaign. One-call centers, industry groups, and trade associations have produced materials bearing the Dig Safely logo which have been widely distributed at trade shows, and industry functions. Southwest Bell is using the Dig Safely logo on bill inserts which will be distributed for three months across a five state area.

Question. What are the anticipated activities of this team during the next year?

Answer. The Team is in a transitional phase, with necessary turnover due to the pressure of other commitments. We are replacing outgoing members of the team from those organizations as well as adding additional representation from other groups with a large stake in damage prevention, such as underground facility locators and the National Energy Board of Canada. We have invited the National League of Cities, the Edison Electric Institute, the National Cable Television Association and other interested parties to provide representation on the Team. The Team will continue to conduct training sessions across the country and to accept speaking engagements to promote the campaign. Some campaign materials are being translated into Spanish; the translation of the manual has already been completed. We are exploring other outlets for campaign materials such as permitting offices, equipment rental centers, and retail home improvement sites. We expect the private sector, non- profit organization to assume management of the Dig Safely Campaign. We anticipate that the Team itself will then function as a technical committee of the non-profit organization.

Question. Since last year, what have you done to motivate states to improve their one-call notification systems and excavation damage prevention activities? How much is planned for that activity in fiscal year 2000?

Answer. Each OPS regional office works with its state pipeline safety partners to encourage strong damage prevention programs and to assess operators' performance against the best practices guidelines we provided to states on how to perform these assessments. OPS also made one-call grant funds available to States. For the past

few years, many States have significantly improved their one-call notification systems and damage prevention activities by strengthening State one-call legislation, increasing enforcement efforts, and continuing public education. This considerable increase in one-call efforts has occurred since agency one-call program activities began. For fiscal year 2000, Congress authorized $1 million in grant funds for State pipeline safety agency work in damage prevention and an additional $1 million to support the advancement of Best Practices under a separate grant program authorized under the Transportation Equity Act for the 21st Century (TEA–21). TEA–21 grant funding will improve operational efficiency of one-call systems, including marking, locating, planning and design activities and would support States electing to implement Best Practices developed by the damage prevention study. For the past year and a half, State pipeline safety representatives served on the damage prevention "Best Practices" study authorized by TEA–21. OPS provided funding for their participation. Through their participation, they became more knowledgeable on how to improve and enhance all aspects of one-call system operations and how to minimize risks of third-party damage.

Question. How much is planned for that activity in fiscal year 2001? Please describe the scope and nature of those activities.

Answer. For fiscal year 2001, OPS is requesting $1 million in grant funds for activities of state pipeline safety, which is the same amount requested last year. For the past few years, many state pipeline agencies have significantly improved their one-call notification systems and damage prevention activities by strengthening state one- call legislation, increasing enforcement efforts, and continuing public education. This considerable increase in one-call efforts has occurred since agency one-call program activities began.

We plan to conduct a separate grant program authorized under the Transportation Equity Act for the 21st Century at the $5 million level in fiscal year 2001. This separate grant funding would improve operational efficiency of one-call systems, including marking, locating, planning and design activities and would support states electing to implement Best Practices developed by the Common Ground initiative.

Based on the assessment undertaken as part of the Common Ground Study, we believe the vast majority of states have extensive work to do to improve all aspects of their damage prevention programs. Funding will be provided to improve the overall quality and effectiveness of state damage prevention programs, including enhanced communication systems, record retention capabilities, training and public education efforts, and using more effective locating devices and other emerging technologies. Common Ground showed us that damage prevention is a responsibility shared by all stakeholders. This funding will allow for improvement of damage prevention programs around the country, and prove our commitment to the effort.

Question. What progress has been made in establishing a foundation to advance damage prevention activities? How much seed money is DOT going to provide to help establish such a foundation? What are the expected total federal costs to ensure the successful operation of the foundation for at least one year?

Answer. OPS is currently assisting in the establishment of a non-profit organization to advance damage prevention efforts consistent with the spirit of communication and shared responsibility resulting from the Common Ground Study. Organizational teams are working on drafting the necessary by-laws, developing a business plan for the organization, and identifying any necessary criteria for membership.

OPS has committed "seed resources" to facilitate the initial start-up of this organization, currently known as the damage prevention "Path Forward." These resources consist of OPS staff and OPS-funded consultants that work on the initiative.

After June 2000, this would include OPS assistance in the form of technical services and the continued development of the web-based information system, which provides fundamental communication services among thousands of interested stakeholders. OPS has allocated close to $200,000 in fiscal year 2000, and we requested an increase of $100,000 in fiscal year 2001 to continue to support the formation of the organization. This funding would cover the maintenance and continued development of the web-based information system; as well as print and video communications, and exhibits, holding meetings, logistics, and facilitation.

Question. Would the private sector likely continue that support once federal support ended? How much cost sharing is the private sector likely to contribute?

Answer. During the damage prevention "Path Forward" initiative, OPS has committed seed resources for an 18-month start-up period to support the formation of the non-profit organization. After this time, we expect the organization to be largely self-sustaining and primarily funded by affected industry stakeholder organizations. The Path Forward Finance Team is currently developing a business plan that includes funding strategies for the non-profit organization.

Question. How did you use the additional funds provided last year to improve damage prevention programs. What would you do with additional funds if a similar increase were provided for that activity for fiscal year 2001?

Answer. Additional funds provided last year were used to support production of additional campaign materials; to conduct training sessions across the country; and to provide campaign presentations at a variety of trade, one-call center, and industry functions. Funds were also used for production of a new Dig Safely brochure, which we distributed in large quantities. Since we still receive many requests for manuals and other campaign materials, we would use supplemental fiscal year 20001 funds for production of additional materials and training. We would also use the additional funds to help the new non-profit damage prevention organization produce a video for distribution to TV and cable channels.

We have requested an additional $100,000 in fiscal year 2001 to support formation of the non-profit organization to advance damage prevention to underground facilities. These costs include the maintenance and continued development of the web-based information system, planning conferences and team meetings, logistics, and other communication costs.

Question. How are you working with NTSB to advance damage prevention strategies?

Answer. OPS and NTSB co-sponsored a damage prevention symposium on June 30, 1999, in Washington, DC. We presented the Common Ground Study of one-call systems and damage prevention best practices to the DOT Secretary at this event, and kicked off the Dig Safely public education campaign. We have met with NTSB on several occasions to update them on our efforts and have invited them to participate in the Common Ground Study, as well as in the efforts to establish a non-profit organization to advance underground damage prevention.

There are currently 11 NTSB Safety Recommendation dealing with damage prevention issues. OPS has initially responded to these recommendations, and will continue to do so as the development of the non-profit organization progresses. All NTSB "Open" Recommendations addressing underground damage prevention are currently classified as "acceptable" response. NTSB also recently closed a recommendation regarding directional drilling practices as "Closed—Acceptable Action."

Question. What specific commitments for cost sharing have you gotten from the private sector to help pay the one-call/damage prevention outreach effort. Please quantify cash and in-kind contributions.

Answer. The American Petroleum Institute and Aegis Loss Control, both of which are represented on the Dig Safely Team, underwrote production of several hundred additional Dig Safely Training manuals for distribution to their members and clients. Many one-call centers and industry groups have paid for production of items which bear the Dig Safely logo; these items are being widely distributed. The following groups contributed to the national kick-off of the Dig Safely Campaign: the American Gas Association, the American Public Gas Association, Ameritech, the American Petroleum Institute, the Associated General Contractors of America, the American Association of Railroads, the Association of Oil Pipelines, the Interstate Natural Gas Association of American, and the National Utility Contractors Association. The following organizations have provided in-kind contributions by supporting participation of their representatives on the Dig Safely Team: the National Association of Regulatory Utility Commissioners, the Interstate Natural Gas Association of America; Aegis Loss Control, One Call Systems International, the American Gas Association, the American Public Gas Association, Associated General Contractors of America, the American Petroleum Institute, the National Telecommunications Damage Prevention Council, and the National Association of Pipeline Safety Representatives.

RESEARCH AND DEVELOPMENT AND MAPPING

Question. What is the current status of your pipeline safety R&D plan? How can you assure the Committee that your R&D program will lead to advances to meet your future challenges? Is it time to update that plan.

Answer. The pipeline safety R&D plan which was developed in the early 1990's is presently being updated to bring it in line with current safety issues and needs of RSPA. We have polled our Region Directors for their suggested input to the plan and are in the process of prioritizing the R&D initiatives they have suggested. We will obtain additional input from our headquarters technical staff to arrive at a final plan. Many of our future R&D initiatives will be conducted as collaborative research with the pipeline industry co-funding the projects as is currently done.

We are presently developing agreements to conduct collaborative research in three areas. The first area is advancing magnetic flux leakage technology used on inline inspection (ILI) tools or "smart pigs" to identify and characterize mechanical damage on pipelines. We have just completed a RSPA funded $3.1 million, 40-month contract with Battelle, Southwest Research Institute and Iowa State University. A final report on this research should be available in two months. This research involved examining mechanical damage with a magnetic flux produced along the pipe's longitudinal axis. We are awarding a two-year, $2 million dollar cooperative agreement with GRI to conduct companion research with the magnetic flux oriented in the circumferential direction around the pipe. This additional smart pig research, scheduled to be awarded by the end of March 2000, will be funded 50 percent by RSPA and 50 percent by GRI. The research will provide for better identification and characterization of mechanical damage oriented in the pipe's longitudinal axis. Mechanical damage from excavators is the leading cause of major pipeline accidents.

The second area is advancing acoustic technology for real time monitoring for pipeline right-of-way encroachment and outside force damage. We have agreed to cooperatively fund this research with GRI, which has already started the research. We are awaiting a statement of work from them. The results from this research has the potential to significantly reduce pipeline mechanical damage caused by excavators.

The third area is offshore research project to investigate the validity of data on wall thinning gathered by internal inspection tools. We would hydrostatically test to failure a number of abandoned pipelines and comparing the failure data with the ILI inspection data. We, along with industry and other government partners, are participating in this research sponsored by the Minerals Management Service.

Question. Please describe the progress made in your mapping initiative since last year. When will the project be completed? How much was appropriated and spent on this effort in fiscal years 1998 and 1999 and planned for fiscal years 2000 and 2001? What are the remaining challenges? Will there be a need for funding over the long-term?

Answer. OPS is in the process of collecting natural gas transmission and hazardous liquid trunk line data from pipeline operators for the National Pipeline Mapping System (NPMS). The NPMS consists of a National Repository and 12 state repositories, funded through cooperative agreements, located in Alabama, California, Connecticut, Kansas, Kentucky, Louisiana, Maine, Minnesota, New Jersey, Oklahoma, Pennsylvania, and Texas. Through a current Commerce Business Daily announcement, we are requesting proposals for additional state repositories to join the NPMS.

To date, the program has received data for 10 percent of the pipelines that RSPA regulates. RSPA is working closely with the American Gas Association, the American Public Gas Association, Interstate Natural Gas Association of America, and the American Petroleum Institute and the pipeline operators to achieve the goal of collecting 70 percent of the pipeline data by the end of calendar year 2000. RSPA is also working on collecting the remaining 30 percent which is generally represented by smaller interstate and intrastate transmission operators. An educational workshop is being arranged with the intrastate transmission trade associations to assist the smaller operators with their data submissions. The NPMS repositories will maintain the currency of the data after the initial operator data has been collected, as pipelines are bought and sold, abandoned, and constructed.

The appropriated mapping funds are 3-year Research and Development money and therefore are not necessarily fully spent in the year they are appropriated.

	Fiscal year			
	1998	1999	2000	2001
Appropriated	$400,000	$800,000	$800,000	[1] $800,000
Obligated	510,000	818,000	212,000	N/A

[1] Requested.

The biggest challenge facing NPMS is getting the pipeline operators to participate in the voluntary mapping initiative and submit their data to the NPMS. If we do not have adequate participation in this year on a voluntary basis, we will proceed to a rulemaking.

The NPMS will require continued funding at current levels to continue with NPMS initiatives in data collection, data processing, performing outreach, data dissemination, and funding for the National Repository and state repositories.

GRANTS

Question. For fiscal year 1999 and 2000, please list the states that participated in your hazardous liquids and natural gas state grant programs. For each participating state, display the amount requested by state, the amount of federal grant funds received, and the percentage of federal contribution to total costs represented by that grant. What efforts were taken to increase participation in the grant program?

Answer. Attached are the allocations for fiscal year 1999. As soon as the allocations for fiscal year 2000 are complete, we will forward them to Congress.

RSPA has encouraged further intrastate jurisdiction and improvements to state one-call damage prevention programs. In addition, RSPA has enhanced participation by the states on risk management and industry committee meetings- all of which increase the amount of money available to the states.

1999 NATURAL GAS PIPELINE SAFETY GRANT ALLOCATION

State	Request	State points	Allocation	Percent of funding
Alabama	$385,591	100	$340,438	44
Arizona	397,607	100	350,719	44
Arkansas	211,275	100	186,361	44
California	1,155,167	100	1,018,945	44
Colorado	198,137	100	174,772	44
Connecticut	225,000	95	188,544	42
Delaware	19,723	95	16,527	42
Florida	56,000	95	46,926	42
Georgia	301,936	100	266,330	44
Illinois	279,450	100	245,496	44
Indiana	166,350	100	146,733	44
Iowa	198,550	100	175,136	44
Kansas	346,538	100	305,673	44
Kentucky	252,050	100	222,327	44
Louisiana	330,000	100	291,085	44
Maine	56,900	90	45,243	40
Maryland	154,380	100	136,175	44
Massachusetts	379,312	95	317,852	42
Michigan	308,650	95	258,640	42
Minnesota	686,261	100	605,334	44
Mississippi	133,500	100	117,757	44
Missouri	320,070	95	268,210	42
Montana	22,818	95	19,120	42
Nebraska	77,246	95	64,730	42
Nevada	189,051	100	166,757	44
New Hampshire	101,182	100	89,250	44
New Jersey	348,533	100	307,432	44
New Mexico	170,143	90	135,071	40
New York	1,201,750	100	1,060,035	44
North Carolina	134,975	100	119,058	44
North Dakota	37,817	95	31,960	42
Ohio	499,541	100	440,633	44
Oklahoma	336,372	100	296,705	44
Oregon	161,363	100	142,334	44
Pennsylvania	297,179	95	249,027	42
Puerto Rico	45,000	100	39,693	44
Rhode Island	64,956	90	51,567	40
South Dakota	28,840	90	22,895	40
Tennessee	265,140	100	233,874	44
Texas	1,246,612	100	1,099,606	44
Utah	160,325	100	141,419	44
Vermont	48,095	100	42,423	44

1999 NATURAL GAS PIPELINE SAFETY GRANT ALLOCATION—Continued

State	Request	State points	Allocation	Percent of funding
Virginia	187,500	95	157,120	42
Washington, DC	87,500	95	73,323	42
Washington	270,000	100	238,161	44
West Virginia	273,650	100	241,380	44
Wisconsin	203,300	90	161,393	40
Wyoming	83,700	95	70,138	42
Totals	13,105,485	.....	11,421,058	44

Note.—The ''Request'' represents 50 percent of the states estimated budget. The '' Percent of funding'' is the percentage of the budget represented by the allocation.

1999 HAZARDOUS LIQUID PIPELINE SAFETY GRANT ALLOCATION

State	Request	State points	Allocation	Percent of funding
Alabama	$23,329	100	$20,758	44
Arizona	42,810	100	37,762	44
Arkansas	975,000	100	860,024	44
Kentucky	10,700	90	8,494	40
Louisiana	90,491	100	79,820	44
Minnesota	161,850	100	42,764	44
Mississippi	6,663	100	5,877	44
New Mexico	9,350	85	6,935	37
New York	52,300	100	46,133	44
Oklahoma	100,767	100	88,884	44
Texas	219,991	100	194,048	44
Virginia	17,500	100	15,436	44
Washington	42,586	100	37,564	44
West Virginia	39,250	100	34,621	44
Totals	1,792,487	.....	1,578,942	44

Note.—The ''Request'' represents 50 percent of the states estimated budget. The '' Percent of funding'' is the percentage of the budget represented by the allocation.

Question. RSPA and the states have agreed to attempt to provide 50 percent of the states' pipeline safety program funding from the federal government. As an aggregate, what percent of the states' pipeline safety program funds were appropriated through the OPS state grant program in fiscal years 1998, 1999, and 2000?

Answer. The funding levels for fiscal year 1998 and fiscal year 1999 were 41 percent and 44 percent, respectively. The funding level for fiscal year 2000 will be 40 percent.

Question. Part of the original justification for the increase in the pipeline grant program was that with increased funds the states would be encouraged to expand their enforcement responsibilities. Please provide quantitative data on a state-by-state basis indicating whether that has happened.

Answer. The states have expanded their enforcement jurisdiction in the past few years by adding new intrastate gas and liquid programs and new areas of municipal, LPG, or master meter operators jurisdiction in their particular state and enhanced one-call compliance.

Question. TEA21 authorized a $5,000,000 damage prevention grant program in fiscal year 2001. If funding constraints do not permit full funding of this program in fiscal year 2001, what would be the most effective way to ramp this program up over a two-year period?

Answer. Congress has allocated $1 million for fiscal year 2000 consistent with provisions in the Transportation Equity Act for the 21st Century (TEA–21). We have structured a grant program consistent with provisions in TEA–21. If the additional

$5 million is never allocated, the full effectiveness of this program will not be reached. OPS could make awards as funding is available, requesting applicants to show approved management plans to account for a longer funding period. TEA–21 authorized grant funding to improve state damage prevention programs that were lacking, and this money is badly needed. However, if full funding is not provided, we will provide whatever funding is appropriate based on the points of our award criteria on a pro-rated basis to enhance damage prevention to the extent possible until the full $5 million is available. We would pro- rate the grant to the extent possible to reward those states that best meet our criteria. We are assisting states in reaching a minimum level of progress and encouraging consortium among states to share responsibility for damage prevention.

Question. Please update past data provided on the status of one-call systems, their completeness, effectiveness, legislative status, and enforcement capabilities of the states. How many, and which, states have utilized one-call grant funds to establish one- call programs?

Answer. Within the past 5 years, 18 States have passed or improved one-call legislation: Kentucky, Montana, North Dakota, Nebraska, New Mexico, New York, Oregon, Pennsylvania, Puerto Rico, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming. Since the incident in San Juan, Puerto Rico, in 1996, we have been working closely with Puerto Rico for legislation to create a one-call center. This legislation was passed in September 1998. We also supported Texas in the passage of its first one-call legislation in 1997.

There is also a growing number of States with a strong one-call enforcement mechanism (Arizona, Connecticut, Massachusetts, Minnesota, New Hampshire, New Jersey, Tennessee, and Virginia) that include:

—A specific agency with jurisdiction over excavators and facility operators.

—Authority to issue immediate citations and the power to collect penalties.

—Administrative encouragement and staff assigned to enforce the law.

Eleven States do not require all underground facility operators to belong to one-call organizations. We expect several state legislatures to enact or modify one-call legislation for this purpose.

More than 30 States have emergency service available on a 24-hour basis. In States without 24-hour emergency service, excavators have to notify operators of impending excavation after business hours.

OPS has also utilized one-call grant funds to support States to establish one-call programs. This past year, 33 States have requested one-call grants to further one-call activities. Many of these States are preparing to request TEA–21 grant funds to expand their damage prevention efforts by implementing Best Practices within their States.

VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER

Question. For fiscal year 1998 and fiscal year 1999, what percent of funds were contracted out? For fiscal year 2000 what percent of funds do you plan to contract out?

Answer. For fiscal years 1998 and 1999, 77 percent and 73 percent, respectively, of the Center's obligations were contracted to the private and university sectors. We estimate the percentage to be approximately the same for fiscal year 2000.

Question. What percent of your personnel costs are for contract administration, technical program direction, and in-house research?

Answer. Five percent of personnel costs are for contract administration. 70 percent is tied to specific project work, including technical direction. No funding or staff was devoted to in- house research (i.e., independent research and development not tied to a client project) in fiscal year 1999 and none is planned for fiscal year 2000. The remaining 25 percent of personnel costs cover facility operations, business services, staff development, managerial process improvements, stakeholder reporting, and outreach. Question. Please discuss the current staffing situation at Volpe in relationship to current and anticipated workload.

Answer. The competitive nature of recruiting for technical skills has caused some delays in filling positions needed for current and projected work, especially in the areas of systems planning, analysis, and simulation, surveillance, infrastructures, etc.

Question. Please break out, in tabular form, obligations by each of the DOT modal administrations to the Volpe Center for each of the last three fiscal years. What is the significance of these funding trends?

Answer. The following table shows Volpe Center obligations for projects with the following DOT Operating Administrations in millions of dollars.

	Fiscal year		
	1998 actual	1999 actual	2000 estimate
FAA	84.5	72.0	78.6
FHWA	11.8	13.3	13.4
USCG	6.8	6.4	7.5
FRA	10.9	11.9	10.9
FTA	7.5	8.8	8.8
NHTSA	8.8	7.8	8.9
RSPA	6.6	5.1	7.1
OTHER DOT	2.3	6.0	6.0
OST	2.6	0.7	0.8
Total	141.8	132.0	142.0

Note.—Each amount includes the customers' participation in DOT's Small Business Innovative Research (SBIR) program, which the Volpe Center manages.

The trends reflect changes in our customers' program emphasis as well as changes to DOT's appropriations.

Question. What are the Volpe overhead charges and how have you tried to reduce these charges? Please provide a detailed explanation and dollar figures of all overhead costs for each of the last three fiscal years.

Answer. Following is the distribution of the Center's indirect expenses (in millions of dollars obligated):

[In millions of dollars]

Indirect activity	Fiscal year		
	1998 actual	1999 actual	2000 etimate
Facility Operations	$3.4	$3.4	$3.4
Business Services	9.8	8.8	9.8
Line Management	2.5	2.7	2.8
Center-wide Services	1.5	1.5	1.7
Computer & LAN Services	3.8	3.4	3.7
Industry Outreach	0.3	0.3	0.4
Capability Development	0.3	0.3	0.4
Plans & Pgm Development	0.9	1.6	1.8
Chief Counsel	0.3	0.3	0.4
Executive Management	1.0	1.1	1.0
Total Indirect	23.8	23.4	25.4
Total Obligations [1]	197.0	174.0	202.0
Indirect to Total (percent)	12.0	13.4	12.6

[1] Net of recoveries of prior year obligations.

The estimated fiscal year 2000 indirect expenses reflect increases for salaries, benefits, negotiated contract price adjustments and other normal cost growth plus an amount for depreciation of prior year capital investments and increased investment in staff training and recruitment. Current energy conservation technology has offset some of the Center's increases.

Question. Please provide a detailed listing of all fiscal year 1999 and fiscal year 2000 new start reimbursable agreements that the Volpe Center has with other Federal agencies. Include all costs that are paid out to contractors hired by the Volpe Center.

Answer. Following is a list of all the fiscal year 1999 and fiscal year 2000 new start reimbursable agreements. NASA Aviation Safety Program Risk Assessment and Mitigation is the only fiscal year 2000 new start.

PROJECT: Aviation Mail Hazmat Support Services

SPONSOR: United States Postal Service (USPS)
FUNDING: $1.6 Million
CONTRACT PERCENT: 40 percent
The Volpe Center will support the Aviation Mail Security group by assisting in the planning, development, implementation of policies, and training supporting HAZMAT acceptance, handling, transportation, and delivery.

PROJECT: Region 8 Site Assessment and Redemption
SPONSOR: Environmental Protection Agency (EPA)
FUNDING: $10.7 Million
CONTRACT PERCENT: 81 percent
To provide environmental support services in the assessment, design, remediation, restoration and oversight of contaminated sites in Region 8.

PROJECT: Information Transition & Organizational Planning Office (ITOP)
SPONSOR: EPA FUNDING: $70 Thousand
CONTRACT PERCENT: 0 percent
Volpe will support EPA in designing and establishing its new Office of Environmental Information.

PROJECT: Philadelphia Support Office
SPONSOR: Department of Interior/National Park Service (NPS)
FUNDING: $35 Thousand
CONTRACT PERCENT: 37 percent
The Volpe Center will work with NPS, Philadelphia Support Office, in the planning for the management of parks in its region as they relate to existing and anticipated transportation issues.

PROJECT: National Marine & Fisheries Vessel Monitoring
SPONSOR: National Oceanographic and Atmospheric Administration (NOAA)
FUNDING: $1.0 Million
CONTRACT PERCENT: 73 percent
The Volpe Center will support NOAA's National Marine and Fisheries Service (NMFS) in the development of a comprehensive Vessel Monitoring System (VMS) to ensure compliance with the NMFS fishing regulations and international agreements on protection of controlled fish stocks.

PROJECT: Energy Motor Carrier Safety Evaluation
SPONSOR: Department of Energy (DOE)
FUNDING: $50 Thousand
CONTRACT PERCENT: 24 percent
Develop a safety status supported process for the Doe National Transportation Program (NTP) to evaluate motor carriers for use in transportation radioactive materials and waste from site cleanup.

PROJECT: Security Review of Treasury Facilities
SPONSOR: United States Treasury Department
FUNDING: $80 Thousand
CONTRACT PERCENT: 21 percent
Support will be provided for the development and implementation of a physical security review concept of operations plan (PSR CONOPS). The CONOPS documents a proposed course of action to be undertaken by Treasury that, at a minimum, increases the physical security of Treasury owned assets, as well as assets where Treasury employees work, to the minimum physical security standard required by the 1995 US Marshal Service Study. The Volpe Center will analyze the information and develop the CONOPS that maps a course to increase facility security for identified bureaus.

PROJECT: Advanced Communications for Aviation
SPONSOR: National Aeronautics and Space Administration (NASA), Glenn Research Center (GRC)
FUNDING: $75 Thousand
CONTRACT PERCENT: 60 percent
The Volpe Center will support NASA in the development of advanced communications concepts (primarily satellite-based) for civil aviation. Two tasks will be performed: (1) Identification of spectrum management issues (including approaches to their resolution) that are likely to arise when implementing new communications techniques in the National Airspace System(NAS); (2) exploration of the feasibility of employing the merging Ultra Wide Band (UWB) technology for aviation communications.

PROJECT: NASA Small Aircraft Transportation System

SPONSOR: NASA Langley
FUNDING: $100 Thousand
CONTRACT PERCENT: 14 percent
Assess the commercial feasibility of a next generation small aircraft and supporting air & ground infrastructure.

PROJECT: Environmental Support to Hanscom AFB
SPONSOR: U.S. Air Force (USAF)
FUNDING: $50 Thousand
CONTRACT PERCENT: 14 percent
Volpe Center will provide environmental oversight services to the Air Force and Navy during the construction, demonstration, and operation of this world class high-frequency radio wave generator in Alaska.

PROJECT: National Airspace System (NAS) Engineering & Installation Support
SPONSOR: USAF
FUNDING: $1.0 Million
CONTRACT PERCENT: 14 percent
The USAF Electronic Systems Center (ESC) National Airspace Systems Program Office (GAA) has the responsibility for national airspace systems implementation for the Department of Defense (DOD). ESC/GAA, site implementation group (SIG), had been accomplishing the additional site preparation effort at various DOD military bases. The Volpe Center competed for, and won, the contract (in the form of a Reimbursable Agreement) to accomplish site preparation at various DOD military bases.

PROJECT: Naval Air Systems Command Advanced Technology Launcher
SPONSOR: U.S. Navy (USN)
FUNDING: $150 Thousand
CONTRACT PERCENT: 40 percent
Reviews conducted by the Naval Air Systems Command have indicated technologies exist that, if utilized in an advanced technology launcher, could eliminate the launcher's dependence on propulsion plant system. A survey of industry confirmed that industry was capable of developing selected technologies into operational launch systems with Navy sponsorship. The Volpe Center will conduct assessments of technologies expected to be proposed by the Advanced Technology Launcher (ATL) contractor and provide technical expertise in linear motor technology as well as linear motor and magnetic guidance and suspension control systems.

PROJECT: DOD Duty Free Entry Program Evaluation
SPONSOR: Defense Logistics Agency (DLA)
FUNDING: $60 Thousand
CONTRACT PERCENT: 16 percent
The Volpe Center will support DLA in determining whether or not the current Duty Free Entry program for foreign imports for DOD and its contractors is economically viable. The Volpe Center federal staff will work with the Defense Contract Management Command New York customs Team that manages duty-free program and DLA's Operations Research and Resources Analysis office (DORRA).

PROJECT: NASA Aviation Safety Program Risk Assessment and Mitigation
SPONSOR: NASA Langley
FUNDING: $200 Thousand
CONTRACT PERCENT: 8 percent
The Aviation Safety Program (AvSP) is a NASA technology focus program, which was formed to improve aviation safety through the introduction of technical advances that enable the reduction of fatal accidents. The Volpe Center, in collaboration with the NASA Safety and Mission Assurance personnel at Ames Research Center, Dryden Flight Research Center, Glenn Research Center, and Langley Research Center, will help the AvSP projects identify, track, and identify ways to mitigate risks.

QUESTIONS SUBMITTED TO THE UNITED STATES COAST GUARD

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

FISCAL YEAR 1999 AND 2000 REPROGRAMMINGS AND TRANSFERS

Question. Please provide the amount and description of all reprogrammings or transfers of funds that occurred during fiscal year 1999 and thus far in fiscal year 2000.

Answer. There have been no congressional reprogrammings in the Operating Expenses (OE) appropriation in fiscal year 1999 and thus far in 2000. The table below shows the transfers to the OE appropriation in fiscal year 1999 and thus far in 2000.

Agency	Amount	Reason for transfer
Fiscal year 1999:		
Information Technology Systems and Related Expenses	$20,505,000	Y2K projects.
Information Technology Systems and Related Expenses	7,210,000	Y2K projects.
Information Technology Systems and Related Expenses	4,058,000	Y2K projects.
Office of National Drug Control Policy (ONDCP)	94,798	High Intensity Drug Trafficking Area (HIDTA)
Fiscal year 2000: None		

There have been no transfers of funds in the Acquisition, Construction, and Improvements (AC&I) appropriation in fiscal year 1999 or thus far in fiscal year 2000. The following tables show the amount and description of reprogrammings that occurred within AC&I in fiscal year 1999 and thus far in 2000 for the appropriation.

UNITED STATES COAST GUARD ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS—FISCAL YEAR 1999 REPROGRAMMING ACTIONS

[Dollars in thousands]

Fiscal year funding	Project title	Brief description of reprogramming	Amount
1999	COASTAL BUOY TENDER (WLM) REPLACEMENT	PROJECT SAVINGS	−$3,000
1999	DEEPWATER CAPABILITY REPLACEMENT ANALYSIS	INSUFFICIENT FUNDS	−3,000
1997	CONVERSION OF SOFTWARE APPLICATION	PROJECT SAVINGS	−1,500
1997	FLEET LOGISTIC SYSTEM (FLS)	PROCUREMENT MODULE	1,500
1997	CONVERSION OF SOFTWARE APPLICATION	PROJECT SAVINGS	−800
1997	MARINE INFO FOR SAFETY AND LAW ENFORCEMENT	INSUFFICIENT FUNDS	800
1998	TRAFFIC AND COLLISION AVOIDANCE SYSTEM(TCAS)	PROJECT SAVINGS	−1,000
1999	ROLES AND MISSIONS	CONGRESSIONALLY DIRECTED STUDY	1,000
1997	TRAFFIC AND COLLISION AVOIDANCE SYSTEM(TCAS)	PROJECT SAVINGS	−500
1997	GLOBAL POSITIONING SYSTEM INSTALLATION	INSUFFICIENT FUNDS	500
1998	STATION BELLINGHAM—RELOCATION	PROJECT SAVINGS	−222
1998	ISC KODIAK HANGAR RENOVATION	CONTRACT CHANGE ORDERS	222
1999	COASTAL BUOY TENDER (WLM) REPLACEMENT	PROJECT SAVINGS	−400
1999	ATS-CONVERSION	COMPLETE PRE-COMMISSIONING OUTFITTING	400
1998	CONFIGURATION MANAGEMENT	PROJECT SAVINGS	−88
1998	ATS-CONVERSION	INSUFFICIENT FUNDS	88
1998	COAST GUARD DISTRICT ONE—CONST BAYONNE PIER	PROJECT SAVINGS	−96
1998	ISC KODIAK HANGAR RENOVATION	CONTRACT CHANGE ORDERS	96
1998	CONVERSION OF SOFTWARE APPLICATION	PROJECT SAVINGS	−130
1998	FLEET LOGISTICS SYSTEM (FLS)	INSUFFICIENT FUNDS	130
1999	OPTIMIZE COAST GUARD TRAINING INFRASTRUCTURE	CONGRESSIONAL APPROVAL	−2,200
1999	GROUP STATION NEW ORLEANS		2,200
1997	TRAFFIC AND COLLISION AVOIDANCE SYSTEM (TCAS)	PROJECT SAVINGS	−80
1997	HC–130 ENGINE CONVERSION	INSUFFICIENT FUNDS	80
1998	CONVERSION OF SOFTWARE APPLICATION	PROJECT SAVINGS	−170
1998	FLEET LOGISTICS SYSTEM (FLS)	INSUFFICIENT FUNDS	170
1998	STATION BELLINGHAM—RELOCATION	PROJECT SAVINGS	−27
1998	ISC KODIAK HANGAR RENOVATION	CONTRACT CHANGE ORDERS	27
1996	COASTAL BUOY TENDER (WLM) REPLACEMENT	PROJECT SAVINGS	−2,800
1996	SEAGOING BUOY TENDER REPLACEMENT (WLB)	FUND CONTRACT CHANGE ORDER	2,800

1997	COASTAL BUOY TENDER (WLM) REPLACEMENT	PROJECT SAVINGS	−8,100
1997	SEAGOING BUOY TENDER REPLACEMENT (WLB)	FUND CONTRACT CHANGE ORDER	7,907
1997	POLAR ICEBREAKER REPLACEMENT FOLLLOW-ON	FUND START-UP TRAINING	193
1998	COASTAL BUOY TENDER (WLM) REPLACEMENT	PROJECT SAVINGS	−3,150
1998	SEAGOING BUOY TENDER REPLACEMENT (WLB)	FUND CONTRACT CHANGE ORDER	3,150
1998	DEFENSE MESSAGE SYSTEM (DMS) IMPLEMENTATION	PROJECT SAVINGS	−140
1998	COMMUNICATIONS SYSTEM (COMSYS) 2000 PH II	INSUFFICIENT FUNDS	140
1999	STATION OSWEGO—47 FOOT MLB IMPROVEMENT	PROJECT SAVINGS	−30
1999	STA CAPE DISAPPOINTMENT 47 FOOT MLB IMPROVEMENT	CONTRACT CHANGE ORDERS	30
1998	STATION BELLINGHAM—RELOCATION	PROJECT SAVINGS	−35
1998	GROUP WOODS HOLE—WATERFRONT RENOVATION	CONTRACT CHANGE ORDERS	35
1997	COASTAL BUOY TENDER (WLM) REPLACEMENT	PROJECT SAVINGS	−1,170
1997	BUOY BOAT REPLACEMENT PROJECT (BUSL)	CONTRUCTION OF FINAL TWO HULLS	1,170
1998	SEAGOING BUOY TENDER REPLACEMENT (WLB)	OVERESTIMATED CONTRACT CHANGE ORDER	−1,400
1998	ATS–1 CONVERSION	COMPLETION OF CGC ALEX HALEY CONVERSION	1,400
1999	SEAGOING BUOY TENDER REPLACEMENT (WLB)	OVERESTIMATED CONTRACT CHANGE ORDER	−1,100
1999	ATS–1 CONVERSION	COMPLETION OF CGC ALEX HALEY CONVERSION	1,100
1999	PROCEEDS FROM THE SALE OF HYDE PARK	USE OF OFFSETTING COLLECTIONS	−3,042
2000	COAST GUARD HOUSING—VARIOUS PROJECTS	APPROVED BY CONGRESS	1,000
2000	CONSTRUCT PATROL BOAT MAINTENANCE FAC. SAN JUAN	APPROVED BY CONGRESS	465
1999	HURRICANE GEORGE'S SUPPLEMENTAL	APPROVED BY CONGRESS	1,000
2000	SURVEY AND DESIGN	APPROVED BY CONGRESS	577

UNOBLIGATED AND CARRYOVER FUNDS

Question. Please provide a list of any unobligated funds and carryover funds by account or program from previous fiscal years.

Answer. The Operating Expenses (OE) account was appropriated $2,781,039,000 in fiscal year 2000, of which $791,117,233 was unobligated as of 31 March. OE carried over $186,532,744 from fiscal year 1999 to fiscal year 2000. Of these funds, $178,117,000 was carried over and are available until September 30, 2000, for emergency Kosovo funding pursuant to the 1999 Emergency Supplemental Appropriations Act, Public Law 106–31. $8,415,744 were carried over and are available until September 30, 2001, for Y2K funding, pursuant to the Omnibus Consolidated and Emergency Supplemental Appropriations Act for fiscal year 1999, Public Law 105–277.

The following tables provide a list of unobligated funds carried forward from previous fiscal years for the Acquisition, Construction, and Improvements (AC&I) appropriation.

UNITED STATES COAST GUARD ACQUISITON, CONSTRUCTION, AND IMPROVEMENTS APPROPRIATION
ESTIMATED UNOBLIGATED BALANCES BY PROJECT—AS OF 03/31/00

[Dollars in thousands]

Fiscal year appropriation	Project titles	Balance by fiscal year	Project total
1996	47-FOOT MOTOR LIFEBOAT (MLB) REPLACEMENT	$4	
1997	47-FOOT MOTOR LIFEBOAT (MLB) REPLACEMENT	131	
1998	47-FOOT MOTOR LIFEBOAT (MLB) REPLACEMENT	1,217	
1999	47-FOOT MOTOR LIFEBOAT (MLB) REPLACEMENT	750	
2000	47-FOOT MOTOR LIFEBOAT (MLB) REPLACEMENT	1,300	$3,402
1996	82-FOOT WPB CAPABILITY REPLACEMENT	2	
1997	82-FOOT WPB CAPABILITY REPLACEMENT	452	454
1997	87 COASTAL PATROL BOAT	5	5
1998	ATS–1 CONVERSION (HALEY)	50	
1999	ATS–1 CONVERSION (HALEY)	400	450
1996	COASTAL BUOY TENDER (WLM) REPLACEMENT	31	
1997	COASTAL BUOY TENDER (WLM) REPLACEMENT	2,637	
1998	COASTAL BUOY TENDER (WLM) REPLACEMENT	5,848	
1999	COASTAL BUOY TENDER (WLM) REPLACEMENT	18,996	27,512
1998	COASTAL PATROL BOAT (CPB) REPLACEMENT	1,266	
1999	COASTAL PATROL BOAT (CPB) REPLACEMENT	2,231	
2000	COASTAL PATROL BOAT (CPB) REPLACEMENT	1,000	4,497
1996	CONFIGURATION MANAGEMENT	3	
1997	CONFIGURATION MANAGEMENT	41	
1998	CONFIGURATION MANAGEMENT	88	
1999	CONFIGURATION MANAGEMENT	28	
2000	CONFIGURATION MANAGEMENT	3,700	3,860
NO YEAR	CUTTER SENSOR AND COMMUNICATION SYSTEM	2,806	
NO YEAR	CUTTER SENSOR AND COMMUNICATION SYSTEM	209	3,015
2000	DEEPWATER REPLACEMENT PROJECT	3,000	3,000
NO YEAR	DEPLOYABLE PURSUIT BOAT ACQUISITION	1,156	1,156
1998	GREAT LAKES ICEBREAKER CAPABILTY	32	
1999	MACKINAW REPLACEMENT	3,000	
2000	MACKINAW REPLACEMENT	13,000	16,032
1998	POLAR CLASS RELIABILITY IMPROVEMENTS PROJECT (RIP)	854	
2000	POLAR CLASS RELIABILITY IMPROVEMENTS PROJECT (RIP)	4,100	4,954
1997	POLAR ICEBREAKER REPLACEMENT (PIR)	22	
1998	POLAR ICEBREAKER REPLACEMENT (PIR)	124	
1999	POLAR ICEBREAKER REPLACEMENT (PIR)	411	
2000	POLAR ICEBREAKER REPLACEMENT (HEALY)	478	1,035
1996	SEAGOING BUOY TENDER (WLB) REPLACEMENT	227	
1997	SEAGOING BUOY TENDER (WLB) REPLACEMENT	214	
1999	SEAGOING BUOY TENDER (WLB) REPLACEMENT	509	

UNITED STATES COAST GUARD ACQUISITON, CONSTRUCTION, AND IMPROVEMENTS APPROPRIATION
ESTIMATED UNOBLIGATED BALANCES BY PROJECT—AS OF 03/31/00—Continued

[Dollars in thousands]

Fiscal year appropriation	Project titles	Balance by fiscal year	Project total
2000	SEAGOING BUOY TENDER (WLB) REPLACEMENT	60,947	61,897
1997	STERN LOADING BUOY BOAT BUSL REPLACEMENT	10	.....
1998	STERN LOADING BUOY BOAT BUSL REPLACEMENT	75	.....
2000	STERN LOADING BUOY BOAT BUSL REPLACEMENT	2,288	2,373
1997	SURFACE SEARCH RADAR REPLACEMENT	43	.....
1998	SURFACE SEARCH RADAR REPLACEMENT	8	.....
1999	SURFACE SEARCH RADAR REPLACEMENT	123	.....
2000	SURFACE SEARCH RADAR REPLACEMENT	2,851	3,025
1998	SURVEY & DESIGN—CUTTERS & BOATS	40	.....
1999	SURVEY & DESIGN—CUTTERS & BOATS	300	340
	TOTAL, VESSEL	137,007	137,007
NO YEAR	AIRCRAFT SENSOR AND C–130 ENGINE UPGRADE	816	816
NO YEAR	APS RADAR DRUG	163	163
1998	GLOBAL POSITION SYSTEM INSTALLATION	1,160	1,160
1998	HC–130 AIRCRAFT SENSOR UPGRADE	476	.....
1999	HC–130 AIRCRAFT SENSOR UPGRADE	10,500	10,976
1999	HC–130 ENGINE CONVERSION	225	.....
2000	HC–130 ENGINE MODIFICATION	2,500	2,725
2000	HC–130 LONG RANGE SEARCH AIRCRAFT	5,900	5,900
1999	HC–130 SIDE LOOKING AIRBORNE RADAR (SLAR)	132	132
1999	HH–60J NAVIGATION SYSTEM UPGRADE	177	.....
2000	HH–60J NAVIGATION SYSTEM UPGRADE	3,800	3,977
2000	HH–65 CONVERSION, AIR FACILITY SOUTHERN LAKE MICHIGAN	4,324	4,324
1999	HH–65A ENGINE CONTROL PROGRAM	4,833	4,833
2000	HH–65A ENGINE RE–POWER PROGRAM	6,999	6,999
1998	HH–65A HELICOPTER KAPTON REWIRING REPLACEMENT	126	126
1999	HH–65A HELICOPTER KAPTON REWIRING REPLACEMENT	4,500	.....
2000	HH–65A HELICOPTER KAPTON REWIRING REPLACEMENT	3,360	7,860
1999	HH–65A HELO MISSION UNIT COMPUTER REPLACEMENT	43	.....
2000	HH–65A HELO MISSION UNIT COMPUTER REPLACEMENT	3,608	3,651
1999	HU–25 AIRCRAFT AVIONICS IMPROVEMENT	872	872
2000	HU–25 RE–ENGINEERING	6,000	.....
1998	LONG RANGE SEARCH AIRCRAFT CAPABILITY PRESERVATION	1,578	1,578
NO YEAR	MARITIME PATROL AIRCRAFT ACQUISITN	33,064	33,064
NO YEAR	OPERATIONAL TEST, USE OF FORCE FROM AIRCRAFT	100	100
NO YEAR	REACTIVATE OF HU–25 JETS	493	493
2000	SIDE LOOKING AIRBORNE RADAR PH II	1,100	1,100
NO YEAR	TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM (TCAS)	432	432
1998	TRAFFIC ALERT AND COLLISION AVOIDANCE SYSEM (TCAS)	1,203	1,203
	TOTAL, AIRCRAFT	98,484	98,484
1998	AVIATION LOGISTICS MANAGEMENT INFORMATION SYSTEM (ALMIS)	2,150	.....
1999	AVIATION LOGISTICS MANAGEMENT INFORMATION SYSTEM (ALMIS)	1,000	.....
2000	AVIATION LOGISTICS MANAGEMENT INFORMATION SYSTEM (ALMIS)	2,700	5,850
1999	COMMERCIAL SATELLITE COMMUNICATION UPGRADE	3,645	.....
2000	COMMERCIAL SATELLITE COMMUNICATION UPGRADE	4,049	7,694
1998	COMMUNICATION SYSTEM (COMMSYS) 2000	2	.....
1999	COMMUNICATION SYSTEM (COMMSYS) 2000	425	427
1998	CONVERSION OF SOFTWARE APPLICATION	1,000	1,000
1998	DEFENSE MESSAGE SYSTEM (DMS) IMPLEMENTATION	1	.....

UNITED STATES COAST GUARD ACQUISITON, CONSTRUCTION, AND IMPROVEMENTS APPROPRIATION
ESTIMATED UNOBLIGATED BALANCES BY PROJECT—AS OF 03/31/00—Continued

[Dollars in thousands]

Fiscal year appropriation	Project titles	Balance by fiscal year	Project total
1999	DEFENSE MESSAGE SYSTEM (DMS) IMPLEMENTATION	800	
2000	DEFENSE MESSAGE SYSTEM (DMS) IMPLEMENTATION	3,477	4,278
1998	FLEET LOGISTICS SYSTEM (FLS)	20	
1999	FLEET LOGISTICS SYSTEM (FLS)	27	
2000	FLEET LOGISTICS SYSTEM (FLS)	3,001	3,048
1998	FREQUENCY SPECTRUM REALLOCATION	1,246	1,246
1999	LOCAL NOTICE TO MARINERS (LNM) AUTOMATION	41	41
1998	MARINE INFORMATION FOR SAFETY AND LAW ENFORCEMENT (MISLE).	9	
1999	MARINE INFORMATION FOR SAFETY AND LAW ENFORCEMENT (MISLE).	31	
2000	MARINE INFORMATION FOR SAFETY AND LAW ENFORCEMENT (MISLE).	4,463	4,503
1999	MARITIME DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS)	4,108	4,108
1998	NATIONAL DISTRESS SYSTEM MODERNIZATION	103	
1999	NATIONAL DISTRESS SYSTEM MODERNIZATION	961	
2000	NATIONAL DISTRESS SYSTEM MODERNIZATION	16,000	17,064
1998	PERSONNEL MANAGEMENT INFORMATION SYSTEM/MIL PAY SYSTEM	8	
1999	PERSONNEL MANAGEMENT INFORMATION SYSTEM/MIL PAY SYSTEM	20	28
1998	PORTS AND WATERWAYS SAFETY SYSTEM (PAWSS)	7	
1999	PORTS AND WATERWAYS SAFETY SYSTEM (PAWSS)	1,150	
2000	PORTS AND WATERWAYS SAFETY SYSTEM (PAWSS)	4,500	5,657
1998	VHF–FM HIGH–LEVEL SITE PHIII	615	615
	TOTAL, OTHER EQUIPMENT	55,559	55,559
1999	AIR STATION CAPE COD—REPLACEMENT ELECTRIC DISTRIBUTION SYSTEM.	385	385
2000	AIR STATION RAMP STRUCTURAL IMPROVEMENTS—ELIZABETH CITY, NC.	3,800	3,800
1999	AIRSTATION MIAMI—RENOVATE FIXED WING HANGAR	3,600	3,600
NO YEAR	COMSTA MIAMI RESTORATION (ANDREW)	319	319
2000	CONSTRUCT PATROL BOAT MAINTENANCE FACILITY—SAN JUAN, PR	3,100	3,100
1999	GROUP STATION NEW ORLEANS, LA—RELOCATION	2,878	2,878
2000	HOMEPORTING OF DRUG INTERDICTION ASSETS	2,800	2,800
NO YEAR	HURRICANE GEORGES SUPPLEMENTAL	7,620	7,620
1998	INTEGRATED SUPPORT COMMAND (ISC) KETCHIKAN REPLACE BREAKWATER.	222	222
1998	INTEGRATED SUPPORT COMMAND (ISC) PORTSMOUTH, VA	98	98
NO YEAR	MIDWEST FLOOD SUPPLEMENTAL	171	171
1998	MINOR AC&I SHORE CONSTRUCTION PROJECT	477	
1999	MINOR AC&I SHORE CONSTRUCTION PROJECT	405	
2000	MINOR AC&I SHORE CONSTRUCTION PROJECT	6,000	6,882
2000	MODERNIZE COAST GUARD STATION SHINNECOCK HAMPTON BAYS, NY.	3,500	3,500
1998	PUBLIC FAMILY QUARTERS	10	
1999	PUBLIC FAMILY QUARTERS	70	
2000	PUBLIC FAMILY QUARTERS	3,175	3,255
2000	RELOCATE COAST GUARD MARINE SAFETY OFFICE AND STATION CLEVELAND, OH.	1,000	1,000
2000	RENOVATE AIR STATION MIAMI HANGAR, OPLOCKA, FL PH II	3,500	3,500
1998	STATION BELLINGHAM RELOCATION	51	51
1999	STATION DAUPHIN ISLAND, AL—RELOCATION	3,191	3,191

UNITED STATES COAST GUARD ACQUISITON, CONSTRUCTION, AND IMPROVEMENTS APPROPRIATION ESTIMATED UNOBLIGATED BALANCES BY PROJECT—AS OF 03/31/00—Continued

[Dollars in thousands]

Fiscal year appropriation	Project titles	Balance by fiscal year	Project total
1999	STATION NEAH BAY WATERFRONT RENOVATION	71	71
1999	STATION OSWEGO 47 FOOT MLB IMPROVEMENTS	312	312
1998	SURVEY & DESIGN—SHORE PROJECTS	1	.....
1999	SURVEY & DESIGN—SHORE PROJECTS	1	.....
2000	SURVEY & DESIGN—SHORE PROJECTS	4,500	4,502
2000	UNALASKA PIER	8,000	8,000
2000	WATERWAYS AIDS-TO-NAVIGATION PROJECTS	5,000	5,000
	Total SHORE PROGRAM	64,257	64,257
	TOTAL, ALL CATEGORIES	355,307	355,307

LIST OF FINAL RULEMAKINGS

Question. Please prepare a list of all final rulemakings that have been issued since last year.

Answer. Below is a list of all final rules issued by Coast Guard Headquarters program offices since January 1, 1999. Copies of all Coast Guard final rules have been submitted to both Houses of Congress as required by the Congressional Notification Act.

NOTICES OF PROPOSED RULEMAKING PUBLISHED SINCE APRIL 1, 1999

DOCKET NUMBER	PUB DATE	TITLE
USCG–1998–3386	2/1/99	Adjustment of Fees for Issuing Numbers to UndocumentedVessels in Alaska.
USCG–1998–3868	12/7/99	Outer Continental Shelf Activities.
USCG–1998–4354	3/22/99	Tank Vessel Response Plans forHazardous Substances.
USCG–1998–4593	3/16/00	Revision to Federal Blood Alcohol Concentration (BAC) Standard for Recreational Vessel Operations.
USCG–1999–4976	11/15/99	Frequency of Inspection, Alternate Hull Examination Program for Certain Passenger Vessels, and Underwater Surveys for Passenger, Nautical School, and Sailing School Vessels.
USCG–1999–5040	3/2/00	Safety of Uninspected Passenger Vessels Under the Passenger Vessel Safety Act of 1993 (PVSA).
USCG–1999–5149	4/8/99	Response Plans for Marine Transportation-Related Facilities Handling Non-Petroleum Oils.
USCG–1999–5700	6/17/99	Traffic Separation Schemes: Off San Francisco, in the Santa Barbara Channel, in the Approaches to Los Angeles-Long Beach, California.

RULEMAKING THAT THE COAST GUARD HAS PUBLISHED IN THE FEDERAL REGISTER IN THE LAST 12 MONTHS

Question. Please list and explain the major notices of proposed rulemaking that the Coast Guard has published in the Federal Register in the last 12 months?

Answer. Below is a list of all notices of proposed rulemaking issued by Coast Guard Headquarters program offices since April 1, 1999.

FINAL RULES PUBLISHED SINCE January 1, 1999

DOCKET NUMBER	PUB DATE	TITLE
USCG–1997–2799	8/4/99	User Fees for Licenses, Certificates of Registry, and Merchant Mariner Documents.
USCG–1998–3423	5/17/99	Implementation of the National Invasive Species Act of 1996 (NISA) (Interim rule).
USCG–1998–3472	4/24/99	Rules of Practice, Procedure, and Evidence for administrative Proceedings of the Coast Guard (Interim Rule).
USCG–1998–3821	2/10/99	Coast Guard Child Development Services Programs.
USCG–1998–3824	2/2/99	Maritime Course Approval Procedures.
USCG–1998–4445	10/19/99	Fire Protection Measures forTowing Vessels (Interim Rule).
USCG–1998–4469	4/27/99	Management Information System (MIS) Requirements.
USCG–1998–4819	6/23/99	Year 2000 (Y2K) Reporting Requirements for Vessels and Marine Facilities (Temporary Interim Rule).
USCG–1998–4819	8/2/99	Year 2000 (Y2K) Reporting Requirements for Vessels and Marine Facilities (Temporary Interim Rule).
USCG–1999–4976	2/9/00	Frequency of Inspection.
USCG–1999–5036	3/2/99	Conformance of the Western Rivers Marking System With the United States Aids to Navigation System (Final Rule; delay of implementation date).
USCG–1999–5118	11/30/99	Standard Measurement System Exemption from Gross Tonnage (Direct Final Rule).
USCG–1999–5151	3/1/00	Update of Standards From the American Society for Testing and Materials (ASTM)(Direct Final Rule).
USCG–1999–5525	6/1/99	Mandatory Ship ReportingSystems (Interim Rule).
USCG–1999–5832	6/29/99	Technical Amendments; Organizational changes; Miscellaneous Editorial Changes and Conforming Amendments.
USCG–1999–6141	3/20/00	Puget Sound Vessel TrafficService (Direct Final Rule).
USCG–1999–6216	10/1/99	Technical Amendments; Organizational Changes; Miscellaneous Editorial Changes and Conforming Amendments.
USCG–1999–6224	11/19/99	Licensing and Manning forOfficers of Towing Vessels(Interim Rule).

PROPERTIES EXCESSED IN FISCAL YEAR 2000 AND FISCAL YEAR 2001

Question. Please provide a list of all properties the Coast Guard declared excess in fiscal year 2000 and expects to excess during fiscal year 2001.

Answer.

DESCRIPTION	EXCESS IN FISCAL YEAR	STATE
LORAN STATION MIDDLETOWN	2000	CA
LIGHT STATION PATOS ISLAND	2000	WA

DESCRIPTION	ANTICIPATED EXCESS IN FISCAL YEAR [1]	STATE
LIGHT STATION GUARD ISLANDS	2001	AK
LIGHT STATION MARY ISLAND	2001	AK
AMELIA LIGHT	2001	FL
BLYTHE ISLAND LIGHT	2001	FL
BOCA GRANDE LIGHT	2001	FL
CAPE CANAVERAL LIGHT	2001	FL
CITY LIMITS LIGHT	2001	FL
CROOKED RIVER LIGHT	2001	FL
EGMONT KEY LIGHT	2001	FL
SANIBEL LIGHT	2001	FL

DESCRIPTION	ANTICIPATED EXCESS IN FISCAL YEAR [1]	STATE
BUCK ISLAND LIGHT	2001	PR
CULEBRITA LIGHT	2001	PR
CHARLESTON LIGHT	2001	SC
SULLIVAN'S ISLAND LIGHT	2001	SC
MATAGORDA LIGHT	2001	TX
SOUTH JETTY LIGHT	2001	TX

[1] Anticipated Excess.—The Coast Guard is in the process of preparing the documentation necessary to determine if these properties are excess to its needs. Other factors (such as environmental issues) may impact the projected timelines and delay the actual Report of Excess or Notice of Relinquishment.

EXPECTED ASSET SALE COLLETIONS

Question. Please provide a table showing a description of each asset sale and the amount collected during fiscal years 1999, 2000, and 2001.

Answer. The following lists the personal property that has been sold during fiscal years 1999 and 2000 and those projected for 2001. These sales were conducted by the General Services Administration with all proceeds returned to the general treasury. Items marked with an asterisk are assets that are anticipated to be offered for sale

Fiscal year 1999—No asset sales.

FISCAL YEAR 2000

Asset	Sale date	Sale price
USCGC PAPAW	December 17, 1999	$63,888.00
USCGC SORREL	December 17, 1999	75,010.00
USCGC PRIMROSE	March 9, 2000	79,999.88
CG–55012	March 9, 2000	52,886.88
Marine Engines, Cummings Model 12900M w/trans. (2 engines)	March 21, 2000	4,631.00
Marine Engines, Cummings Model 12900M w/o trans (2 engines)	March 21, 2000	4,181.00
Warping Drums for Anchor Windlass from 180 ft Buoy Tender	March 21, 2000	600.00
* USCGC SPAR	Summer 2000	TBD
* USCGC MALLOW	Summer 2000	TBD

FISCAL YEAR 2001

Asset	Sale date	Sale price [1]
180-ft Seagoing Buoy Tenders and Spare Parts Kits	Various	TBD
82-ft Patrol Boats & Spare Parts Kits	Various	TBD
44-ft Motor Life Boats	Various	TBD
HU–25 Aircraft	Various	TBD

[1] Individual asset sales prices are as yet undetermined. Consistent with the President's Budget, however, the Coast Guard would anticipate netting approximately $10 million from the collective sale of these assets.

OFFSETTING COLLECTIONS FROM FEDERAL SOURCES

Question. Please explain the source and amount of offsetting collections from "Federal sources."

Answer. The Coast Guard anticipates the collection of $125 million in fiscal year 2001 from federal sources (per page OE–4). These offsetting collections come from various federal agencies as follows:

[Dollars in millions]

Source	Amount	Description
Dept. of Defense	$32	Funds for personnel costs, medical/dental services, parts and maintenance, maintenance of aircraft radar, sonar, and weapons.
Dept. of Transportation	9	Funds for USCG TSC Telenet, National Response Center, DAFIS, NASSIF/TRANS Medical Unit, Security Policy and Planning, OMEGA Project, FAA liaison.
EPA	3	Funds for personnel costs, CERCLA,[1] environmental management, pollution mitigation.
Other Govt. Agencies	56	Funds for NSF,[2] NOAA,[3] DOS,[4] OSIA,[5] Customs, FEMA,[6] Interior, Panama Canal Commission, icebreaker fuel/maintenance, security assistance, Customs Forfeiture Fund, migrant interdiction.
OSLTF	25	Funds for oil spill response.
TOTAL	125	

[1] Comprehensive Environmental Response, and Compensation Liability Act.
[2] National Science Foundation.
[3] National Oceanic and Atmospheric Administration.
[4] Department of State.
[5] Order Sons of Italy in America.
[6] Federal Emergency Management Agency.

MILITARY PAY AND ALLOWANCES

Question. Please breakdown the military pay and allowances in greater detail (basic pay, within-grade increases, specialty pay, etc.) and compare to the fiscal year 2000 allocation.

Answer. The following breakdown in military pay and benefits includes all appropriations:

COAST GUARD SPECIAL, INCENTIVE AND RETENTION PAY FOR MILITARY PERSONNEL (ALL APPROPRIATIONS)

Category	Fiscal year	
	2000 (est)	2001 (est)
Responsibility Pay	$138,000	$138,000
Diving Pay	65,000	65,000
Hostile Fire/Imminent Danger Pay	680,000	680,000
Sea Pay	13,600,000	13,750,000
Hardship Duty Pay—Location	108,000	110,000
Aviation Career Incentive Pay	7,500,000	7,500,000
Hazardous Duty Incentive Pay	5,500,000	5,500,000
Special Duty Assignment Pay	2,500,000	2,800,000
Selective Reenlistment Bonuses [1]	9,795,000	10,500,000
Aviation Career Continuation Pay	1,000,000	1,300,000
Targeted Enlistment Bonuses [1]	6,205,000	7,500,000
Applicant College Fund	150,000	150,000
Clothing and Uniform Allowances	13,100,000	13,500,000
Subsistence and Rations	90,500,000	93,000,000
Housing Entitlements	248,370,000	284,000,000
Station Allowances and COLA	29,000,000	39,000,000
Other Entitlements	29,999,000	32,144,000
Basic Pay	912,300,000	962,300,000
Social Security Admin. Payments	78,130,000	82,227,000

COAST GUARD SPECIAL, INCENTIVE AND RETENTION PAY FOR MILITARY PERSONNEL (ALL APPROPRIATIONS)—Continued

Category	Fiscal year	
	2000 (est)	2001 (est)
Total	1,448,640,000	1,556,164,000

[1] The table on page PPA–5 of the Coast Guard congressional stage budget is incorrect. The correct information for Selective Reenlistment Bonuses and Targeted Enlistment Bonuses are contained in the above table.

CIVILIAN PAY AND BENEFITS

Question. Please breakdown the civilian pay and benefits in greater detail and compare to the fiscal year 2000 allocation.

Answer. The following breakdown of Coast Guard civilian pay and benefits includes all appropriations:

Category	Fiscal year	
	2000 (est)	2001 (est)
Basic Pay—Full Time Permanent	$237,147,000	$251,681,000
Basic Pay—Other than Full Time Permanent	9,576,000	10,163,000
Health Insurance, Life Insurance & Retirement	57,362,000	60,878,000
Lump Sum Leave Payments	750,000	796,000
Bonuses & Awards	2,674,000	2,762,000
Other Compensation	11,978,000	12,712,000
Total Pay & Benefits	319,487,000	338,992,000

TRICARE REMOTE

Question. What progress has the Coast Guard made in improving health care coverage for personnel stationed at remote locations where TRICARE is insufficient or nonexistent?

Answer. The Coast Guard continues to use non-federal health care contractual arrangements to provide active duty service members' health care where there are no established TRICARE Prime network providers or TRICARE Prime Remote services provided. In working with DoD/TRICARE, providers in certain Alaska areas are now receiving higher reimbursement. Signing new providers and retaining existing providers indicates that many are satisfied with this increase. Also, additional training is being given to providers on accurate coding or procedures.

Currently there is a significant disparity in services to family members in remote areas, which affects approximately 50 percent of these members. TRICARE Prime Remote is being developed in fiscal year 2001 to improve "TRICARE Prime-like" benefits for these personnel.

COAST GUARD PARTICIPATION IN TRICARE

Question. What legal requirements does the Coast Guard have by virtue of being a participant in the Department of Defense's TRICARE system?

Answer. The Coast Guard, as a Uniformed Service (Army, Navy, Air Force, Marine Corps, Coast Guard, National Oceanic and Atmospheric Administration, and the United States Public Health Service) is required by law (statute) to be a full participant in the Department of Defense TRICARE program. TRICARE combines the Military Healthcare System and the Civilian Health and Medical Program of the Uniformed Services; as such, it provides care for our active duty, retiree, and family members. The Coast Guard is a full participant in the program, and is required to provide care to members of each of the other uniformed services on an equal basis. In addition, the Coast Guard provides the same benefit packages to its members as do the other Services. Likewise, the other military services are available to provide care to Coast Guard beneficiaries. This care is provided on a "fee-for-service" basis.

MILITARY TRICARE VERSUS CIVILIAN HEALTH CARE COST

Question. What is the difference between the average cost to provide TRICARE to military personnel, retirees, and their dependents and healthcare benefits to Coast Guard civilian employees, retirees, and their dependents?

Answer. Depending on location and options of coverage, the average cost of healthcare for military personnel, retirees, and their dependents and the cost of healthcare benefits provided to Coast Guard civilian employees, retirees, and their dependents can vary considerably. Using the fiscal year 2001 estimate of $176 million in health care costs compared against our military FTE, the cost is about $407 per month per military person. To compare the military plan to the Federal Employee Health Benefit Program (FEHBP). We chose plan prices for Washington D.C. as a reasonable median for medical insurance rates. There are lower rates present in some rural areas, but there are also many areas in which a significant number of Coast Guard personnel reside where medical rates are much higher (e.g. the Atlantic, Pacific, and Gulf seaboards; Alaska; and Hawaii). The rate that should be used for comparison with military health plans for active duty personnel and their dependents is the column labeled "Monthly Fee." Full costs should be considered, as TRICARE does not charge enrollment premiums for active duty dependents.

Company [1]	Monthly Fee [2]	Gov't Portion [3]	Employee Portion [4]
Aetna	$761.57	$594.02	$167.55
Alliance	1073.46	837.29	236.17
APWU	829.20	646.77	182.43
Association	904.33	705.37	198.96
Blue Cross Blue Shield	1323.09	1032.00	291.09
Capital Care	762.93	595.08	167.85
Free State	1071.69	835.91	235.78
GEHA	912.61	711.83	200.78
George Washington	619.52	483.22	136.30

[1] This identifies the name of the company providing the medical insurance. All rates quoted are for the Washington, D.C. area.

[2] This is the total amount of premium. This fee provides insurance for the employee and his/her family. This number must be used for a like comparison to the military health care system since no premiums are charged for active duty family members under TRICARE.

[3] This identifies the amount the government pays under the FEHBP insurance plan. For civilian employees, the government pays 78 percent of the insurance premium.

[4] This identifies the amount the employee pays under the FEHBP insurance plan. For civilian employees, the employee pays 22 percent of the insurance premium.

Source.—http://www.opm.gov/hr/insure/00/states/dc/index.html

ALLOCATION OF TRAINING AND EDUCATION FUNDS

Question. Please explain in detail, by center and course of instruction, how the Coast Guard proposes to allocate the $85.557 million requested for training and education. How does this compare to the allocation of funds provided during fiscal year 2000?

Answer. The funding information for training and education shown on pages PPA–1 and PPA–24 is incorrect. The proper amounts shown should be as follows:

[In thousands of dollars]

	Fiscal year		2001 request level
	2000 estimate level	2001 required changes	
E. Training & Education	74,991	3,591	78,582

The allocation of the $74,991,000 for fiscal year 2000 and $78,582,000 for fiscal year 2001 is as follows:

[In thousands of dollars]

	Fiscal year	
	2000	2001
Training Travel, Transportation, & Tuition. Includes inter-service agreement with the Navy for flight training	34,703	37,192
Training Center Cape May, NJ. (enlisted accessions training)	8,746	8,994
Coast Guard Academy, New London, CT; (officer accessions and leadership development training)	12,908	13,180
Aviation Training Center, Mobile, AL, and Aviation Technical Training Center, Elizabeth City, NC; (officer and enlisted flight training)	5,394	5,778
Training Center Yorktown, VA; (enlisted and officer advanced training)	8,380	8,505
Training Center Petaluma, CA; (enlisted and officer advanced training)	4,860	4,933

COAST GUARD RECRUITING BUDGET

Question. Why is the budget request for recruiting flat when compared to fiscal year 2000 even though the Coast Guard has ambitious recruiting goals and still faces stiff competition for personnel from a strong economy?

Answer. The information contained on pages PPA–1 and PPA–25 is incorrect. The fiscal year 2001 budget actually reflects an increasing emphasis upon work force recruiting; the proper amounts should be shown on page PPA–1 as follows: (in thousands of dollars)

[In thousands of dollars]

	Fiscal year		2001 request level
	2000 estimate level	2001 required changes	
F. Recruiting	10,877	2,305	13,182

PACIFIC AREA COMMAND BUDGET

Question. Why is the budget request for Atlantic Area Command increasing by $4.565 million while the request for Pacific Area Command is decreasing by $4.322 million?

Answer. The President's fiscal year 2001 Budget proposes a change to the reimbursement policy for polar icebreaking services provided to the National Science Foundation (NSF). A programmatic reduction of $7,800,000 in the Coast Guard's budget presentation has been included to reflect this policy shift. Because the Coast Guard's three Polar Class icebreakers fall under the operational control of the Pacific Area Commander, this programmatic reduction impacts that funding account.

OTHER ACTIVITIES

Question. Please explain in greater detail by project or activity the line "other activities" and how the Coast Guard proposes to allocate the $1.653 million requested.

Answer. This PPA II line item provides funding for the Chief of Staff's Contingency Account. The $1.653 million in funding for this account is for agency contingencies, natural or mission related emergencies below the scope of a supplemental appropriation, and critical program needs arising since submission of the Congressional budget.

HEADQUARTERS DIRECTORATES

Question. Please breakdown the request for Headquarters Directorates, including a description of each office, number of civilian and military personnel assigned to each office, and amount of funding requested for each office.

Answer. The following table provides a detailed breakdown of the Headquarters Directorates for fiscal year 2001. All military and civilian personnel listed are funded by the Operating Expenses (OE) appropriation.

[In thousands of dollars]

	Fiscal year 2001 (projected funds)	Military	Civilian
G–M	11,184	150	123
G–O	47,038	219	116
G–S	9,525	103	89
G–W	27,773	126	92
G–A	800	3	47
HSC and Other HQ Offices	127,093	201	205
Total	223,413	802	672

Description of each office:

Marine Safety and Environmental Protection Directorate (G–M)

The Marine Safety and Marine Environmental Protection programs support four of the five strategic goals of the Coast Guard: safety, protection of natural resources, mobility and maritime security. Principle responsibilities include establishing federal policies and standards for the design, construction, equipment, manning, operations and maintenance of commercial vessels, and for the qualifications of their crew; developing standards for handling hazardous materials onboard vessels & marine facilities; negotiating international maritime safety and environmental protection standards on behalf of the U.S.; assuring U.S. vessel compliance with domestic and international standards and compliance by all vessels and regulated facilities in U.S. ports and waters, through a combination of education, monitoring, and enforcement; controlling vessel and facility operations to correct or reduce significant safety, security, or environmental threats; coordinating national protocols for preparedness planning, training, and exercising; and directing response activities to mitigate the effects of maritime casualties and pollution.

Operations Directorate (G–O)

The Operations Directorate develops doctrine and policy; provides guidance; allocates resources; and coordinates with other countries, government agencies, and industry to employ Coast Guard forces and accomplish Coast Guard operational maritime missions. G–O is the program manager for Coast Guard aircraft, cutters, and boats. The Assistant Commandant for Operations (G–O) is responsible for ensuring that operations resources effectively support the five Coast Guard Strategic Goals of Safety, Protection of Natural Resources, Mobility, Maritime Security and National Defense. Support is provided through seven Operations Policy (G–OP) offices, which provide doctrine, policy and resource requirements for Operational Programs such as the airborne use of force initiative. In addition, support is also provided through six Operations Capability (G–OC) offices, providing facility management, capability and resource acquisition support. The Coast Guard Investigative Service is also part of G–O.

Human Resources Directorate (G–W)

The Human Resources Directorate executes programs to meet the personnel requirements of the Coast Guard. This includes the execution of programs that ensure quality employee development and integrate human resource support functions at minimal cost. Examples include workforce management support for the active duty, reserve, and civilian workforces, training and education, health and safety, interservice agreements with Department of Defense (DoD) for common personnel and security, diversity enhancement, and Information Resource Management (IRM) support for Human Resource management information systems. The G–W Directorate meets the needs of Coast Guard people by providing centrally managed quality of life support services, such as employee assistance, transition assistance, family support, and housing support programs.

Systems Directorate (G–S)

The Systems Directorate executes policy and programmatic management of engineering, logistics, information and technology, and command, control, communications, and computer functions and systems in support of Coast Guard operations. The Engineering Division handles the aeronautical, civil, naval, and ocean engineering programs along with environmental compliance and restoration. The Logistics Division deals with logistics policy and design, implementation, and oversight of logistics systems. The Information and Technology Division encompasses information

systems architecture and planning, information management, and research and development. The Command, Control, Communications, and Computers Division manages the electronics engineering program and communications and computer systems. The Systems Resource Management Division oversees overall planning and fiscal efforts for the Directorate. G–S also manages the Federal Telephone System (FTS), Postal, and GSA rent central funds.

Acquisition Directorate (G–A)

The Acquisition Directorate is a specialized element of Headquarters focused on acquiring major and non-major assets and systems. G–A manages the timely acquisition of capable, supportable, and affordable systems, products and services needed by sponsors to accomplish Coast Guard missions. The directorate is composed of resource management, technical, and contract support staff, and a variety of acquisition projects. Recent acquisition projects include the 175′ and 225′ buoy tenders, the icebreaker CGC HEALY, and the Traffic and Collision Avoidance System (TCAS) for use aboard Coast Guard aircraft. Deepwater Concept Exploration, National Distress and Response System Modernization Project, and Great Lakes Icebreaking Capability Replacement are examples of current projects in G–A.

Headquarters Support Command (HSC) and other Headquarters Offices

Funding for the Headquarters Support Command provides consolidated support for Coast Guard Headquarters including: administrative, logistics, transportation, facilities, information services, and health services. Also funded in this category are the Assistant Commandant for Civil Rights, Legal, Chief of Staff, and the Office of the Commandant.

COAST GUARD HEADQUARTERS MANAGED UNITS

Question. Please breakdown the request for Headquarters Managed Units, including a description of each office, number of civilian and military personnel assigned to each office, and amount of funding requested for each office.

Answer. The following table provides a detailed breakdown of the Headquarters-managed units for fiscal year 2001. All military and civilian personnel listed are funded by the operating expenses appropriation.

[In thousands of dollars]

	Fiscal year 2001 (projected funds)	Military	Civilian
Engineering Logistics Center	6,764	172	318
Finance Center	7,247	45	247
Human Resources Service & Information Center	1,362	144	103
Coast Guard Yard	2,901	68	6
National Strike Force	3,758	29	9
National Pollution Funds Center	1,357	19	33
Command & Control Engineering Center	6,424	90	17
Air Station Washington	856	15	.....
Operations System Center	9,905	24	22
Telecommunications & Information Systems Command	4,853	158	31
Navigation Center	1,633	94	10
Intelligence Coordination Center	568	25	8
Electronics Engineering Center—LORAN Support Unit	561	28	6
Container Inspection Training & Assist Team	291	9	.....
Institute	750	19	8
Research & Development Center	1,287	1	2
Coast Guard Personnel Command	2,221	393	135
National Maritime Center	2,604	7	29
Total	55,342	1,340	984

Description of each unit:

Engineering Logistics Center (ELC)

The ELC, located in Baltimore, MD, is the focal point for management of vessel and electronics logistics: managing platform and equipment configuration; developing maintenance policy; setting vessel parts allowance standards; providing design

and engineering support; managing and distributing approximately $190M of Coast Guard unique inventory that cannot be effectively sourced directly from commercial vendors and is not managed by Department of Defense logistics systems; and developing, managing and providing technical information and logistics information systems support. Funds within this account also pay salaries for the included federal wage grade personnel employed by the ELC.

Finance Center (FINCEN)

The FINCEN, located in Chesapeake, VA, is responsible for the payment of all government and commercial bills and maintaining all accounting records and submission of reports for all units within the Coast Guard except Inventory Control Points (ICPs). In fiscal year 1998, the FINCEN managed more than 4,700,000 accounting transactions while also coordinating the payments and acting as auditor of the government-wide credit card program. The FINCEN provides guidance for selecting and training individuals who have fund certification authority, unit level guidance for separation of financial duties, funds certification, account reconciliation, and Coast Guard-wide management of the Large Unit Financial System (LUFS) functions.

Human Resources Service and Information Center (HRS&IC)

HRS&IC, located in Topeka, KS, gathers, maintains, and manages personnel information on all active duty, reserve, and retired Coast Guard military personnel. HRS&IC develops and provides personnel, financial, and accounting reports and information for Coast Guard managers and other government agencies. HRS&IC administers the Personnel Management Information System/Joint Uniform Military Pay System (PMIS/JUMPS), and provides payment and personnel support services to active duty, reserve, and retired personnel, as well as annuitants and the NOAA Officer Corps. HRS&IC processes all Coast Guard travel claims, administers the evaluation program and the servicewide examinations for active duty and reserve enlisted personnel; processes reserve and active duty separations and retirements; administers the in-service and out-of-service debt collection program, processes allotments and garnishments, and receives and processes initial reports of all Coast Guard and NOAA personnel casualties.

Coast Guard Yard

The Coast Guard Yard is the only shipbuilding and vessel repair facility operated by the Coast Guard. The Yard's industrial operations include the repair, modification, and construction of vessels; ordnance overhaul and maintenance; manufacturing of miscellaneous equipment; maintenance and repair of vessel components; and providing casualty response support to the fleet. The Yard electronics shop completes electronic work on cutters during yard periods and performs electronic equipment overhauls and develops prototypes in support of Coast Guard mission areas. The Yard has been certified by the Naval Sea Systems Command (NAVSEA) as a Limited Repair Facility (LRF) for Navy owned ordnance.

National Strike Force

The National Strike Force is comprised of three regional Strike Teams (Atlantic Strike Team, Fort Dix, NJ; Gulf Strike Team, Mobile, AL; and the Pacific Strike Team, Hamilton AFB, CA) and the National Strike Force Coordination Center (NSFCC). Each Strike Team is comprised of highly trained personnel and fully-outfitted with a contingent of response and recovery equipment. The NSFCC provides a centralized reporting point for spills of oil or hazardous substances and activates the rapid deployment of oil pollution response resources. The NSFCC also coordinates the National Pollution Response Exercise program, enhancing the preparedness of a network of response capabilities in bulk-liquid maritime ports throughout the country.

National Pollution Funds Center (NPFC)

NPFC administers laws and regulations relating to oil pollution liability and compensation, including carrying out the responsibilities in Title I of the Oil Pollution Act of 1990 that have been delegated to the Coast Guard. The NPFC also acts in a fiduciary capacity under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) for provisions managed by the Coast Guard. The NPFC manages the Oil Spill Liability Trust Fund (OSLTF) to provide funds for response to oil spills in navigable waters of the U.S., adjoining shorelines, and the exclusive economic zone. The NPFC coordinates with the Environmental Protection Agency in matters pertaining to Coast Guard involvement with expenditures and recovery of funds from the Hazardous Substance Response Fund.

Command and Control Engineering Center (C_2CEN)

The C_2CEN located in Portsmouth, VA, is the Coast Guard's Center of Excellence for integrating Command and Control (C_2) engineering and support for all Coast Guard C_2 systems ashore and afloat. Basic missions of the C_2CEN are to provide engineering, systems management and training support at a centralized facility for the following systems:

—Command Display and Control (COMDAC) system
—Optical Surveillance System (OSS)
—Shipboard Command & Control Systems onboard 210′, 270′ & 378′ cutters
—Radar
—Vessel Traffic System (VTS) upgrade
—Differential Global Positioning System (DGPS)
—Short Range Aids to Navigation (SRAN)
—Land Based Support Facility for WLB/WLM Replacement
—Navigation Sensors

Air Station Washington

Air Station Washington operates and maintains the Coast Guard's single Long Range Command and Control aircraft which provides necessary and required transportation and airborne command and control for the Commandant of the Coast Guard and certain members of the Commandant's staff, the Secretary of Transportation and certain members of the Secretary's staff, and occasional Congressional delegations.

Operations Systems Center (OSC)

OSC, located in Martinsburg, WV, develops, supports, and maintains major operational information systems and databases. The OSC provides services that are accessible to the Coast Guard 24-hours per day from around the world to support operational mission accomplishment and mission oversight analysis. The Coast Guard's operational databases include:

—Automated Mutual Assistance Vessel Rescue (AMVER) system, which tracks participating merchant vessels so as to provide a guide to potential assistance in the vicinity when distress calls are received.
—Computer Aided Search Planning (CASP), this system leverages the world class search and rescue expertise of the Coast Guard to produce fast, accurate, and comprehensive search planning that incorporates weather, currents, and numerous other critical factors.
—Law Enforcement Information system (LEIS) II; a client-server data system with links to internal (Coast Guard) and external law enforcement (LE) databases. LEIS II provides tactical LE information to field units on a near real-time basis. It provides the fundamental system for standardization and automation of LE data collection and retrieval.
—Joint Maritime Information Element support system (JMIE): a group of government agencies with common interest in maritime issues. In order to improve their ability to exchange data and support their business programs, the JMIE has developed the JMIE Support System (JSS), a centralized database of maritime information to which analysts from the JMIE consortium agencies have access.
—Marine Safety Information System (MSIS); a mission critical system that supports program management needs, field operations, and decision support requirements. Data is collected at the port level through vessel and facility inspections and compliance, marine violations and casualties, and port activities.
—In fiscal year 1997, three more systems were transferred from the Transportation Computer Center (TCC) in Washington, DC to the OSC; Auxiliary Management Information System (AUXMIS), Search and Rescue Management Information System (SARMIS), and Automated Requisitioning Management System (ARMS). In combination, the information systems at OSC serve as the heart of Coast Guard's search and rescue, law enforcement, and marine safety missions.

Telecommunication and Information Systems Command (TISCOM)

TISCOM, located in Alexandria, VA, is the Coast Guard's Center of Excellence for operating, managing and providing technical support for Coast Guard telecommunication and computer networks. TISCOM manages all voice and message telecommunications including telephone, radio, and satellite systems, security, and configuration control.

The Coast Guard telecommunication and computer systems form an integrated network of voice and message communication capabilities to ensure reliable continuity of operations around the world.

Navigation Center (NAVCEN)

The NAVCEN is collocated with the Telecommunications Systems Command (TISCOM) in Alexandria, VA. The NAVCEN is responsible for gathering, processing, and disseminating timely status and general information about the Global Positioning System (GPS), maritime Differential Global Positioning System (DGPS), National Differential Global Positioning System (NDGPS), and Long Range Navigation (LORAN)-C systems to domestic as well as foreign users of the systems. The NAVCEN also exercises operational control of the U.S. LORAN-C system, the maritime DGPS service, and the Nationwide DGPS service.

Intelligence Coordination Center (ICC)

The ICC is the Coast Guard's strategic intelligence center serving as the focal point for interaction with the intelligence components of the Department of Defense, other law enforcement agencies, and the intelligence community. The ICC is co-located with the National Maritime Intelligence Center (with the Office of Naval Intelligence and the Marine Corps Intelligence Activity) in Suitland, MD. The ICC serves as the focal point for Coast Guard collection management as well as submitting Coast Guard needs to the intelligence community.

LORAN-C Support Unit (LSU)

The Long Range Navigation (LORAN) Support Unit, located in Wildwood, NJ, provides Coast Guard-wide support for LORAN-C marine electronic navigation systems. LORAN-C provides electronic navigation for commercial and privately-owned vessels and aircraft. In addition to providing all maintenance and technical assistance for LORAN, the LSU conducts a variety of projects for the Coast Guard and Federal Aviation Administration to improve existing systems.

Container Inspection Training and Assist Team (CITAT)

The CITAT, located in Oklahoma City, OK, provides hazardous materials identification and handling training to Coast Guard personnel assigned duties as marine safety inspectors. The team also assists field personnel in the performance of their duties to ensure the highest level of proficiency by Coast Guard marine safety inspectors who daily ensure the safety of American ports and waterways.

Coast Guard Institute

The Coast Guard Institute, located in Oklahoma City, OK, manages a variety of training and testing materials for Coast Guard personnel for purposes of advancement and nonresident training. The Institute manages the distribution, administration, and scoring of courses and examinations; as well as publishing advancement lists on the basis of scored examinations.

Research and Development Center (R&D Center)

The R&D Center, located in Groton, CT, conducts applied research to develop operational techniques, concepts, systems, equipment and materials in support of the operational missions and regulatory programs of the Coast Guard. The R&D Center assists Coast Guard operating programs to identify emerging technology that can be integrated into existing or new operational systems that will result in future Operating Expenses (OE) savings. The R&D Center operates a remote Fire and Safety Test Detachment in Mobile, AL which is the only facility in the world that uses real vessel platforms for full-scale fire testing. The R&D Center is the Administrative Target Unit (ATU) for two tenant commands, the Marine Safety Lab, and the International Ice Patrol.

Coast Guard Personnel Command (CGPC)

The CGPC, located in Washington, DC, manages the entire Coast Guard military and civilian workforce. The CGPC oversees all Coast Guard accessions, assignments, advancements and promotions, and separations. The CGPC also conducts Physical Disability Evaluation Boards. The CGPC consists of an administrative staff, an officer personnel management division, an enlisted personnel management division, a reserve personnel management division, a civilian personnel management division, a recruiting center, and a records and correspondence section.

National Maritime Center (NMC)

The NMC, located in Arlington, VA, is an independent USCG Headquarters command that actively pursues new and innovative ways to assist the maritime community in gaining and using the services of the Coast Guard. NMC's primary function is to initiate and execute various marine safety programs at a national and international level. The NMC executes policy, regulations and standards developed by Headquarters, and it acts as the "voice of the program" to external customers. The

NMC maintains an active public and industry awareness outreach program aimed at communicating Coast Guard regulatory activities and policy guidelines. NMC programs consist of several divisions located in Arlington, VA, and four field units located throughout the nation. The four field units are the Marine Safety Center, the National Vessel Documentation Center, the Marine Personnel Administration Division, and the Marine Safety Laboratory.

AVIATION MAINTENANCE BACKLOG

Question. What is the aviation maintenance backlog?

Answer. At the end of fiscal year 1999, the non-recurring Coast Guard aviation maintenance backlog was $18.7 million.

ELECTRONICS MAINTENANCE BACKLOG

Question. What is the electronic maintenance backlog?

Answer. The electronics maintenance backlog includes preventative maintenance that is not completed due to casualty response and obsolete equipment that is in need of replacement. Preventative maintenance for fiscal year 2000 is running at an 80 percent completion rate.

The fiscal year 2000 backlog to replace obsolete electronics equipment is $24.7 million.

VESSEL MAINTENANCE BACKLOG

Question. What is the vessel maintenance backlog?

Answer. The maintenance backlog for vessels consists primarily of depot level maintenance that is deferred. The maintenance backlog for fiscal year 2000 is $12 milliion.

OCEAN ENGINEERING & SHORE FACILITY MAINTENANCE BACKLOG

Question. What is the ocean engineering and shore facility maintenance backlog?

Answer. The ocean engineering and shore facility maintenance backlog consists of waterfront and station facility repairs; Aids to Navigation repairs and replacements; building and housing maintenance and repairs; dredging; structural inspections; utility system repairs; code compliance projects; energy savings projects; safety and health projects; etc. The backlog for ocean engineering and shore facility maintenance this year will be $27.4 million.

ACQUISITION, CONSTRUCTION, & IMPROVEMENTS PROJECT LIST

Question. Please provide a table which displays all Acquisition, Construction, & Improvements (AC&I) projects, number of units required (if appropriate), total prior year spending, fiscal year 2001 request, and outyear funding projections.

Answer. A listing of the all Acquisition, Construction, & Improvements (AC&I) projects is attached.

ITEM	TOTAL UNITS REQUIRED	PRIOR YEAR SPENDING	FISCAL YEAR 2001 REQUEST (DOLLARS IN THOUSANDS)	OUTYEAR
VESSELS:				
SEAGOING BUOY TENDER (WLB) REPLACEMENT	16 hulls	11 hulls; $432.4M	$123,730	$5,000
POLAR ICEBREAKER USCGC HEALY		$36.5M CG funding plus Navy SCN funding.	1,000	
SURFACE SEARCH RADAR REPLACEMENT	106 units	$43.1M	1,150	
87′ PATROL BOAT (WPB) REPLACEMENT	47 hulls	$213.6M	7,000	
GREAT LAKES ICEBREAKER (GLIB) REPLACEMENT	Single-hull replacement for CGC MACKINAW.	$20.3M	111,000	
OTH CUTTER BOATS & SHIP MODS	Install OTH boats on 5 WMEC/WHECs		1,500	7,750
POLAR CLASS RELIABILITY IMPROVEMENT PROJECT (RIP)		$33.1M	4,500	5,000
ALEX HALEY CONVERSION		$20.0M	3,200	5,000
CONFIGURATION MANAGEMENT SYSTEM		$34.6M	3,600	
PATROL CRAFT (WPC) CONVERSION PROJECT	TBD		1,000	
DEEPWATER	TBD	$73.9M	42,300	350,000
AIRCRAFT:				
H65 MISSION COMPUTER UNIT	Replace MCU in 93 helos	$13M for 68 helos	3,650	4,700
H65 ENGINE LIFE-CYCLE COST REDUCTION	Upgrades for 93 helos	$13M for engineering and some components.	1,000	9,900
AVIATION SIMULATOR MODERNIZATION	Upgrade H65 and H25 simulators		3,000	5,000
CGC HEALY AVIATION SUPPORT	Provide 3 helos	0 units	36,000	
OTHER EQUIPMENT:				
FLEET LOGISTICS SYSTEM		$36.8M	5,500	
PORTS & WATERWAYS SAFETY SYSTEM (PAWSS)		$18.3M	8,100	17,600
MARINE INFO FOR SAFETY & LAW ENFORCEMENT (MISLE)		$45.1M	8,500	7,500
AVIATION LOSTICS MANAGEMENT INFORMATION SYSTEM		$11.2M	1,100	
NATIONAL DISTRESS & RESPONSE MODERNIZATION		$25.3M	22,000	
DEFENSE MESSAGE SYSTEM		$6.0M	2,471	7,500
PMIS/JUMPS II		$15.0M	2,000	
COMMERCIAL SATCOM UPGRADE		$8.1M	5,459	
GLOBAL MARITIME DISTRESS & SAFETY SYSTEM		$5.1M	3,083	4,900
SAR CAPABILITIES ENHANCEMENT			1,500	1,400

LOCAL NOTICE TO MARINERS		$1.25M	600	
SHORE:				
REBUILD STATION PORT HURON, MI			1,300	3,000
RENOVAT AIRSTA KODIAK HANGAR		$13.7M	8,200	10,800
TRANSPORTATION IMPROVEMENTS ALAMEDA			8,000	6,300
WATERFRONT IMPROVEMENTS ISC PORTSMOUTH		$1.0M	2,400	
MODERNIZE FACILITIES CAPE MAY		$2.2M	5,800	
MODERNIZE AIRSTA PORT ANGELES HANGAR			3,800	
MINOR AC&I SHORE CONSTRUCTION PROJECTS			8,000	
HOUSING PROJECTS			12,400	
WATERWAYS ATON INFRASTRUCTURE			4,706	

ACQUISITION PROCESS

Question. Before one of the military services of the Department of Defense begins the process of acquiring new equipment, it first must establish a formal requirement for replacement equipment. That stated requirement exists until that service declares through a similar formal process, that the requirement is no longer valid. Would the Coast Guard support the establishment of a similar process?

Answer. The Coast Guard follows this approach. As is required for all Federal agencies, the Coast Guard has a capital management process to establish clear linkages between strategic and performance goals, strategies, activities undertaken to achieve goals, and the assets employed in carrying out those activities. Capital planning and portfolio management are the primary mechanisms by which the Coast Guard equips itself to implement the Coast Guard's mission, vision, and strategic goals. The capital planning process, through mission analysis, establishes mission requirements that are the basis for initiating acquisitions of new or replacement systems. Once an acquisition is begun, mission requirements are revalidated at key decision points throughout the process. If the requirement is found to be no longer valid, business and capital plans are updated and the acquisition is evaluated for modification or termination.

CUTTER AND BOAT DESIGN

Question. Please explain in detail by project or activity the proposed allocation of the $500,000 requested for cutter and boat design and compare to the fiscal year 2000 spending plan.

Answer. The fiscal year 2001 spending plan will follow a similar theme to the fiscal year 2000 plan. It will concentrate on the identification of design parameters and standards that have application to existing and near term Coast Guard acquisitions. It will be used to bridge the gap between existing research and hard design criteria. The effort will have application across a broad spectrum of acquisition, construction and improvement (AC&I) projects. This up-front work is critical to the success/timely execution of projects in that Coast Guard requirements can be better related to contractors through acquisition specifications.

The spending plan includes dynamic stability criteria development, surveys of new cutter technologies and investigations of new hull forms. Efforts to develop improved dynamic stability criteria will enable the Coast Guard to accurately describe and evaluate needed sea-keeping performance in the Deepwater acquisition. The growing mission need for deploying larger and faster boats at sea requires the development of design criteria and the limiting sea conditions for the recovery of these boats using technologies such as stern launch and new davit systems. Efforts in these areas have direct application to Deepwater as well as Over the Horizon (OTH) cutter boat davits for legacy assets. Work with azimuth propulsion hydrodynamic performance will prepare the Coast Guard for evaluating the Great Lakes Icebreaker (GLIB) acquisition and may have implications for Deepwater. The model testing of various boat and river tender hull forms will enable the Coast Guard to develop design requirements for vessels operating in environments that do not have similar commercial counterparts in order to plan for the future replacement of utility boats and coastal aids to navigation assets.

SEAGOING BUOY TENDER (WLB) AVERAGE PRICE PER HULL

Question. The sailaway cost of hulls 10 and 11 of the Seagoing Buoy Tender (WLB) replacement was $69.317 million. The sailaway cost of the three Seagoing Buoy Tenders requested for fiscal year 2001 is $117.095 million. Is the average price of these ships increasing by approximately $5 million, and if so, why?

Answer. No. The sailaway costs are consistent with project requirements. Sailaway costs includes contract award for the three ships requested in fiscal year 2001, unfunded items for ships already awarded, plus fleet support and standardization costs. Unfunded items for ships already awarded includes contract change allowance and Economic Price Adjustment (EPA).

SEAGOING BUOY TENDER (WLB) BASE PRICE AND TOTAL UNIT COSTS

Question. Please provide a table delineating the contract base price for each Seagoing Buoy Tender (WLB), the unfunded liability of each hull, and the total unit costs.

Answer. Contract base award and follow-on contract cost (economic price adjustments and contract changes) information is provided below.

HULL	CONTRACT BASE PRICE AT AWARD	ESTIMATED FUTURE ADDITIONAL CONTRACT COSTS		ESTIMATED CONTRACT COST TO DATE	ESTIMATED CONTRACT COST AT COMPLETION
		FUNDED THRU FISCAL YEAR 2000	UNFUNDED		
201	$40.7			$48.2	$48.2
202	26.8			30.6	30.6
203	24.9			28.4	28.4
204	24.2			30.3	30.3
205	23.8			27.5	27.5
206 [1]	34.2	$5.0		36.3	41.3
207	28.8	5.0		29.3	34.3
208	27.9	4.5	$0.5	28.2	33.2
209	27.9	4.5	0.5	28.2	33.2
210	27.5	2.0	3.2	27.6	32.8
211	27.5	2.0	3.2	27.6	32.8
212 [2]	27.4		7.3		34.7
213 [2]	27.4		7.3		34.7
214 [2]	27.4		7.3		34.7
215	27.4		9.3		36.7
216	27.4		9.3		36.7

[1] 1st of B Class.

[2] Hulls requested in fiscal year 2001.

Note.—Future average unit cost estimate is $41 milliion for the 16-ship WLB fleet. Future average unit cost includes the Estimated Contract Cost At Completion, plus the total of non-contract costs, including Government Furnished Equipment, Fleet Standardization and Support, Logistics/Facilities, Project Administration and Spare Parts.

THIRD SEAGOING BOUY TENDER (WLB) IN FISCAL YEAR 2001

Question. If the third seagoing buoy tender is not procured in fiscal year 2001, is there any legal restriction barring the Coast Guard from negotiating a similar contract option for a third buoy tender in 2002 or an option for another hull in 2003?

Answer. If fewer than 3 ships were procured in fiscal year 2001, a non-competitive contract option would be required to procure the 16th ship, with an expected increase in cost and delay in schedule.

COASTAL PATROL BOAT FISCAL YEAR 2001 BUDGET REQUEST

Question. If the Coast Guard is not requesting to procure 87-foot patrol boats in fiscal year 2001, why is there a request for $7 million in this procurement line?

Answer. With 47 boats on contract, the last Coastal Patrol Boat (CPB) will not be delivered until June 2002, followed by a one-year warranty period. The $7 million is required in fiscal year 2001 for expenses associated with delivering 23 CPBs in fiscal year 2001 and fiscal year 2002-nearly half of the CPB fleet. The primary fiscal year 2001 cost drivers for each CPB includes pre-commissioning crew training, Preliminary Acceptance Trials, Project Resident Office administration of the warranty program, contract closeout, plus procurement and installation of Government Furnished Equipment (GFE) during post-delivery. The balance of the $7 million will enable the Coast Guard to approve pending engineering changes and allow sufficient funds to retrofit boats already delivered. These changes are required to reduce maintenance and insert technology that will significantly reduce life cycle costs over the CPB's 25-year service life.

COASTAL PATROL BOAT COST FOR HULLS 48–50

Question. What is the cost to acquire hulls 48–50?

Answer. The cost to acquire hulls 48–50 is $15 million, or $5 million per hull.

GREAT LAKES ICEBREAKER DETAIL $110M REQUEST

Question. Please break down in greater detail the $110 million request for Great Lakes Icebreaker (GLIB).

Answer. The cost estimate of work to be done in fiscal year 2001 is as follows:

[In millions of dollars]

Ship Construction	98
Detailed Design; Construction; Outfitting/GFE; C4ISR Systems; Integrated Logistics Support; Warranty; Testing	
Studies	6
Validation of design; Review of construction submittals; and Homeporting study	
Project Administration	6
Contract Administration; Project inspection office; ravel; amd Crew training	

GREAT LAKES ICEBREAKER FUNDS EXECUTION IN FISCAL YEAR 2001

Question. If the GLIB construction contract is not scheduled to be awarded until fiscal year 2002, how much of the $110 million is requesting can be executed in fiscal year 2001?

Answer. The Coast Guard plans to award the construction contract in the third quarter of fiscal year 2001. The acquisition strategy is a competitive procurement using a single-phase award to design and construct a multi-purpose icebreaker under a fixed price arrangement.

GREAT LAKES ICEBREAKER FISCAL YEAR 2000 FUNDING

Question. What is the status of the $10 million provided for construction of the GLIB in the fiscal year 2000 transportation appropriations act?

Answer. None of the $10M provided for construction in fiscal year 2000 has been obligated to date. The Coast Guard intends to award a construction contract in fiscal year 2001 using fiscal year 2000 and fiscal year 2001 funds, subject to full funding in fiscal year 2001.

PHASE II PROJECT OF USCGC ALEX HALEY

Question. Will the Phase II project of the CGC Alex Haley be competitively bid?

Answer. Phase II of the USCGC ALEX HALEY project will not be competitively bid. Exportable teams from the Coast Guard Yard will be used to accomplish the work. This approach enables the work to be conducted in homeport without impacting the operational schedule for the vessel. It will also enable the Coast Guard to take advantage of the Yard's previous work experience with the vessel.

CONVERSION OF PC–170 TO COAST GUARD PATROL CRAFT

Question. Please explain in greater detail the two phases of the conversion of the PC–170 to the Coast Guard Patrol Craft (WPC) and the funding of each phase. Will this work be competitively bid?

Answer. The conversion of PC–170 to a Coast Guard Patrol Craft is divided into two phases. Phase I of the project includes $1.2 million to purchase long lead-time material and to fund the initial stages of overhauling the four main diesel engines.

Phase II of the repair and conversion will include outfitting the ship with required equipment and spare parts, making hull structural repairs, completing a dry-docking, upgrading the communications/electronics suites for interoperability with other Coast Guard platforms, and adding a stern ramp to accommodate small boat operations. Phase II funding requirements have not yet been determined.

The Coast Guard intends to complete a majority of this work at the Coast Guard Yard.

DEEPWATER DOT–IG CONCERNS

Question. It is my understanding that the planning phase for the Deepwater project will not be completed before the Coast Guard submits its fiscal year 2002 budget request or congressional action on that request. The Department's Inspector General has stated that "requesting budget authority without critical cost and schedule information carries substantial risk and is inconsistent with acquisition program best practices." What steps is the Coast Guard taking to address this concern?

Answer. The Coast Guard has a sound strategy in place to justify the planned project budget request. Conceptual designs were completed in December 1999 by all three industry teams. The teams are now engaged in the functional design phase, during which they will continue to refine their designs. Functional Design deliverables include concept of operations, total ownership and life-cycle costs estimates, affordability analysis, and implementation plans. Because they are scheduled for submittal throughout the design process, the information will be available for

use in justifying the fiscal year 2002 budget request. Adequate cost and schedule information is available to prepare and justify a fiscal year 2002 budget request. As noted by the Department of Transportation Inspector General, the Deepwater planning process is sound.

DEEPWATER $21 MILLION REQUEST

Question. Please provide a detailed breakdown, which includes project description and level of funding, of $21 million requested for the various assessments and analyses listed on page DEPWT–1 of the budget justification.

Answer. During Functional Design, the Deepwater Project relies on both private sector and government agencies to provide technical support that is not readily available from within the Coast Guard. The support and information obtained will be used in the Coast Guard's assessment of deliverables from each of the three competing industry teams and in preparing for Phase II of the Project. The $21 million requested will be used for the following specific efforts:

—*Trade-off Analyses, Technology Assessments, Technology Demonstrations (approx. $8,5 million).*—Analyses and studies to assess industry optimization of various physical components of their Integrated Deepwater System (IDS) proposals. Studies of new technologies proposed by industry in their Deepwater systems, including capabilities, limitations, applications and best practices. Demonstrations of new technologies and analysis of technical and other issues relating to the integration of new technology into the proposed Deepwater systems and the Coast Guard.

—*Modeling and Simulation (approx. $2 million).*—Continued refinement and execution of the Maritime Operations Simulation model to provide continuous assessment of Functional Design deliverables and provide feedback to the industry teams. Modeling and simulation complement and support the project's technical assessment process as a means to further mitigate risk.

—*Systems Supportability Analysis, Total Ownership Cost Baseline Analysis (approx. $5 million).*—Includes analysis of industry's proposals for logistics support of their IDS, including environmental impact, and facility and systems integration assessments. In accordance with the Project plan and in response to the GAO, the Deepwater Project is developing a total ownership cost baseline of existing Deepwater legacy assets. This information will provide the Coast Guard with a cost baseline for comparison of industry's future Integrated Deepwater System total ownership estimates.

—*Matrix Project Team (MPT) Studies (approx. $3 million).*—The MPTs continually assess the industry teams in each of four principal technical areas (surface, air, logistics, and command and control).

—*Independent Validation and Verification (IV&V) and Test and Evaluation (T&E) (approx. $2 million).*—IV&V of the operational effectiveness model is used to validate the model's stated purpose and verify the underlying assumptions of the model, which is to quantify the ability of a proposed IDS to meet stated performance requirements. T&E plans and processes will be initiated and protocols for testing established.

—*Phase II Request for Proposal Preparation (RFP) and Technical Evaluation Team (TET) Support (approx. $500,000).*—Provides direct support and analysis support for developing the Phase II RFPs and establishment of the Phase II TET that will evaluate the Phase II proposals received from industry.

DEEPWATER INDUSTRY TEAMS TASKS AND FUNDING

Question. How much funding is requested for each industry team and what specific tasks is each team expected to accomplish during fiscal year 2001?

Answer. The Coast Guard expects to provide $5.1 million to each Deepwater industry team in fiscal year 2001, for a total of $15.3 million. These funds will be used for industry's continued refinement of the functional design of their Integrated Deepwater System concepts. Functional Design tasks to be completed during fiscal year 2001 include refinement of: the Integrated Deepwater System and major asset designs; Configuration Management; Logistics; System Implementation Plans; Concept of Operations Plan; environmental impacts; Affordability Analyses; Life Cycle Cost and Total Ownership Cost Estimates.

DISPOSAL OF ASSETS WITH PROCEEDS CREDITED TO DEEPWATER

Question. Has the Coast Guard disposed of any of the assets that are authorized by the fiscal year 2000 transportation appropriations act to be credited to the deepwater appropriation? If so, please explain what was sold and how the funding is being allocated?

Answer. Of the assets authorized by the fiscal year 2000 transportation appropriations act, the Coast Guard disposed of:

—*ESMT Portsmouth, NH.*—disposed at no cost to the City of Portsmouth under the park conveyance provisions in the Code of Federal Regulations,

—*ANT Huron, OH.*—sold for approximately $110,000. The sale proceeds have not yet been received, however the USCG expects approximately $83,600 in net sale proceeds.

DEEPWATER CONTRACT AWARD

Question. When the Coast Guard awards the Deepwater contract, will the award be solely to one industry team and its proposal or will the Coast Guard pick and choose the best, most innovative procurement ideas from each team and compete that item separately?

Answer. The Coast Guard intends to award the Integrated Deepwater System acquisition contract to just one of the three competing industry teams. However, to obtain essential contractual flexibility, the Coast Guard intends to structure the Deepwater acquisition contract as an indefinite delivery, indefinite quantity type contract. The Coast Guard will issue separate delivery orders under this contract to perform the upgrades and acquire the new assets comprising the industry's proposed Integrated Deepwater System. In addition, the Coast Guard intends to include specific Value Engineering and/or Technology Refreshment contract clauses. These clauses will enable the Coast Guard to acquire new technology that meets or exceeds proposed cost and performance levels from firms not originally part of the selected Deepwater industry team. While the so-called "mix and match" option has been preserved, selecting specific assets or components from all three Deepwater industry teams would shift the risk and responsibility for systems integration and interoperability from industry to the government. Similarly, such an approach would invalidate industry's proposed operational effectiveness and total ownership cost estimates as these are based upon the assets in their proposed Integrated Deepwater System concepts. The Coast Guard seeks to acquire an Integrated Deepwater System and this is best achieved by awarding a Deepwater acquisition contract to one team.

FADEC FUNDING ALLOCATION

Question. The fiscal year 2000 transportation appropriations act included $7 million for an HH–65 engine program which could be applied to the fuel control (FADEC) upgrade or for technology insertion through a parts replacement program based on the commercial version of the LTS–101 engine. How is this funding being allocated?

Answer. The majority of these fiscal year 2000 funds are being allocated for technology insertion through a parts replacement process. The Coast Guard is replacing engine parts nearing the end of their service lives with redesigned components that are more reliable, supportable, and efficient. These improved components will extend the overhaul interval on the LTS–101 engine, thus reducing maintenance requirements and overall engine life-cycle costs. Installation of these improved engine components is also a prerequisite for any future power improvement effort.

HH–65 ENGINE POWER RESTORATION PROGRAM

Question. Is the Coast Guard considering an HH–65 engine power restoration program? If this is the case, please describe the program and explain its operational benefits, costs (including non-recurring and recurring costs), and schedule.

Answer. The Coast Guard is studying the need for power restoration for the HH–65 aircraft. Due to required aircraft modifications, as well as the congressionally mandated Rescue Swimmer program, an additional 1,625 pounds has been added to the operational weight of the HH–65. There has been no comparable improvement to the engine performance capability to offset the additional weight. The Coast Guard is not currently pursuing an HH–65 power enhancement program due to more urgent capitalization priorities. Operational benefits, costs and a schedule for a HH–65 power restoration program have not been quantified.

HH–65 ENGINE POWER RESTORATION PROGRAM ACCELERATION

Question. If Congress wanted to accelerate this program by providing non-recurring funding in fiscal year 2001 to reduce schedule concurrency and improve sequencing, what amount could be executed and for what purpose?

Answer. The Coast Guard currently has no program to restore power for HH–65s. The existing HH–65 LTS–101 Engine Life Cycle Cost Reduction Project will replace

obsolete, maintenance intensive components, some of which are required to be replaced if the Coast Guard pursues a power enhancement in the future. Although additional off-the-shelf components for this project could be purchased, they could not be installed in a year's time due to operational commitments of the fleet.

FLEET LOGISTICS SYSTEM

Question. Please provide a breakdown of the Coast Guard's specific procurement plans for the fleet logistics system in fiscal year 2000 and fiscal year 2001.

Answer. The Fleet Logistics System (FLS) project received funding of $6.17 million in fiscal year 2000 (including reprogrammed funds). The FLS fiscal year 2001 budget request is $5.5 million. The Coast Guard's updated procurement plan for these funds is:

[In thousands of dollars]

	Fiscal year	
	2000	2001
FLS Software Development and Implementation	4,239	4,440
FLS Web Based Training Development	525	515
FLS Maintenance	660	.....
Equipment	300	100
Project Management	446	445
Total	6,170	5,500

PORTS AND WATERWAYS SAFETY SYSTEM

Question. On what basis were Berwick Bay, Louisiana and Sault Saint Marie selected to receive the ports and waterways safety systems (PAWSS)?

Answer. The Coast Guard has requested funds to install the Ports and Waterways Safety System (PAWSS) in Berwick Bay, Louisiana, and Sault Saint Marie, Michigan. The Coast Guard evaluated these ports based on a comprehensive view of navigation risk taken together with many years of experience in managing the risks inherent in these our nation's waterways. They have been included in the PAWSS project because there is a compelling federal interest in keeping these VTSs fully operational. The equipment they are using is technologically obsolete and in need of replacement. The Coast Guard recognizes the need for traffic management at these critical waterways and is moving to upgrade the equipment to take advantage of the Automatic Identification System as soon as it becomes available. Converting existing VTSs to the PAWSS operating system will improve vessel traffic center operation and data management.

PORTS AND WATERWAYS SAFETY SYSTEM

Question. The justification indicates that the Coast Guard surveyed three additional ports for installation of PAWSS. On page 786 of the House hearings report for fiscal year 2000, the Coast Guard listed several ports under consideration, but PAWSS is not being implemented at any of these ports. Why is this?

Answer. The areas listed in the House Hearings Report for fiscal year 2000 were some of the ports in which the Coast Guard planned to conduct formal risk assessments in 1999 and 2000. Subsequent installation of a vessel traffic service (VTS) in any port under the Ports and Waterways Safety System (PAWSS) project would only be done had that assessment indicated a VTS was needed to mitigate an unacceptable level of risk.

So far, the risk assessments the Coast Guard has completed in conjunction with local maritime and stakeholder communities have not revealed any additional ports (beyond those where a VTS already exists) where a VTS is necessary or appropriate to mitigate identified risks. Effective risk management remains a constant requirement for the Coast Guard as port risk profiles change over time. The Coast Guard will continue to perform periodic formal and informal risk assessments in our nation's critical ports and waterways.

MARINE INFORMATION AND SAFETY AND LAW ENFORCEMENT COST/SCHEDULE CHANGES

Question. Please explain the nature and extent of cost overruns and schedule delays associated with development of the Marine Information and Safety and Law Enforcement (MISLE) program.

Answer. Prior to October 1999, MISLE development was being accomplished under a contract to Computer Science Corporation (CSC). Due to the nature of the contract, a decision was made to move MISLE development to Operations Systems Center (OSC) at Kearneysville, WV. The project scope remains the same. The OSC development effort is able to utilize the system requirements work completed by CSC, allowing the project to be completed on schedule. The new plan has less risk because the development will be accomplished in incremental, usable pieces as recommended by industry, OMB, and Congressional guidance. Under the new plan, Phase I, in which Marine Safety Network (MSN) functionality replaces Marine Safety Information System (MSIS), will be completed in the third quarter of fiscal year 2001. Phase 2, which begins Law Enforcement Information System (LEIS) II integration and additional functionality, will be completed in the second quarter of fiscal year 2002; and Phase 3, which completes LEIS II and provides new capabilities, will be completed in the fourth quarter of fiscal year 2003. The project will be completed within the schedule and cost baselines, given the requested budget amount.

NATIONAL DISTRESS AND RESPONSE SYSTEM MODERNIZATION CONTRACT

Question. How much funding is requested for each industry team competing for the National Distress and Response System Modernization contract, and what specific tasks is each team expected to accomplish during fiscal year 2001?

Answer. The Independent Government Cost Estimate (IGCE) for the National Distress and Response System Modernization Project (NDRSMP) Design Demonstration and Validation (Phase I) scope of work is $8.5 million. The contract will be structured with a base period (fiscal year 2000 funding) and an option period (fiscal year 2001 funding). The Coast Guard requested sufficient funds in fiscal year 2000 and 2001 to fund up to three (3) contracts for the NDRSMP Design Demonstration and Validation. The entire period of performance for the Phase I contract is 15 months.

As described in the Phase I Request for Proposal (RFP), each contractor is required to:

—conduct surveys of five (5) Coast Guard Groups and the associated units;
—develop a Functional Design to include the Functional Baseline consisting of the System Specification, System Development Specification and Interface Control Document;
—develop a Preliminary Design to include the Allocated Baseline detailing each Configuration Item;
—propose a Product Baseline (production equipment list) developed from the Allocated Baseline (functional list);
—conduct a Critical Functions demonstration to show compliance with the functional requirements of the performance specification;
—perform a cost/performance trade-off analysis on each system parameter identified in the RFP;
—develop an initial Life Cycle Cost Estimate (LCCE) based on the Functional Design, and an updated LCCE based on the Preliminary Design; and
—propose a project management plan for the Development, Production and Deployment (NDRSMP Phase II) for their proposed Product Baseline.

NATIONAL DISTRESS AND RESPONSE SYSTEM MODERNIZATION PROJECT

Question. There still appears to be a significant amount of concurrency in the program schedule for the NDRS modernization. Why is this degree of concurrency necessary; how does it raise the technical, costs and schedule risks of the program; and what specific management controls has the agency implemented to mitigate these risks?

Answer. In November 1999, the Coast Guard Acquisition Review Council (CGARC) approved a revision of the National Distress and Response System Modernization Project (NDRSMP) Acquisition Plan to incorporate a phased acquisition strategy that is generally sequential and mitigates or improves control of project risk. The phased acquisition strategy divides the project into a Design Demonstration and Validation Phase (Phase I) and a Development, Production, and Deployment Phase (Phase II).

During Phase I, a preliminary design will be developed for the NDRSMP. The preliminary design will be demonstrated and validated to show compliance with the

functional requirements of the performance specification. The majority of the Phase I activities are sequential and build upon the prior activity. The Phase I activities were developed to help control or reduce the technical risk.

During Phase II, the production design will be finalized and a regional system built, installed, and tested to achieve Initial Operating Capability (IOC). After IOC, additional systems will be built and fielded to achieve Full Operating Capability (FOC). Several of these activities are sequential, but there are instances when tasks can be performed concurrently without significantly increasing the technical, schedule or cost risk. A large degree of concurrency will still be necessary in Phase II to accomplish the project's milestones and schedule. Concurrent installation of the system at various Coast Guard Groups and units is necessary to achieve timely FOC.

NATIONAL DISTRESS AND RESPONSE SYSTEM MODERNIZATION PROJECT FUTURE COST

Question. Please break down the estimated future cost of $220 million for the NDRS modernization program.

Answer. The estimated future cost for the National Distress and Response System Modernization Project (NDRSMP) provides funding of the NDRSMP Development, Production and Deployment (Phase II). The Coast Guard will be able to better estimate the future costs using the Life Cycle Cost Estimates (LCCE) developed during the Design Demonstration and Validation (Phase I).

[In millions of dollars]

Element	Estimated funding request	Acquisition project baseline (APB) range
Production Design Development	30	25–35
Production and Deployment	190	181–223

Production Design Development consists of developing the detailed design and installing the regional system for Initial Operating Capability (IOC), developmental testing and evaluation during this period, and operational testing and evaluation for acceptance of the IOC system.

Production and Deployment consists of pre-installation site surveys, site preparation work, system production in quantity, and the installation of the system equipment at various Coast Guard Groups and units.

SELF-LOCATING DATUM MARKER BUOYS

Question. How many Self-locating Datum Marker Buoys are the Coast Guard planning to procure as part of the search and rescue capabilities enhancement project? How many are planned for purchase in fiscal year 2002? What is the deployment schedule?

Answer. The Coast Guard is planning on procuring 300 Self-Locating Datum Marker Buoys (SLDMB) in fiscal year 2001 as part of the search and rescue (SAR) capabilities enhancement project. In fiscal year 2002 the Coast Guard will begin annual purchases of 300 to 350 buoys. SLDMBs are expendable, not intended to be recovered following use.

The SLDMBs will be initially distributed to Coast Guard air stations (approximately ten per air station) and restocked as they are used. The distribution to air stations will take place over several months as the SLDMBs become available from the manufacturer.

Actual operational employment of the first SLDMBs in search and rescue missions is expected in late March, 2001.

SURVEY & DESIGN SHORE FACILITY FUNDING BREAKDOWN

Question. With respect to the request of $7 million for survey and design-shore facilities, please breakdown how the agency would allocate funding by facility for each of fiscal years 1999, 2000, and 2001.

Answer. Amounts allocated to individual facilities follow. Many 2000 and 2001 figures are planning estimates and may change as project schedules and design costs are solidified.

Facility	Fiscal year		
	1999 actual	2000 planned	2001 planned
Academy, New London, CT	$250,000	$150,000	$50,000
Air Station Astoria, OR			100,000
Air Station Barbers Point, HI		105,000	125,000
Air Station Elizabeth City, NC		560,000	500,000
Air Station Miami, FL	205,000	210,000	
Air Station North Bend, OR			100,000
Base Galveston, TX		150,000	150,000
Base San Juan, PR	845,000	475,000	150,000
Studies, designs & construction mgmt related to Streamlining	55,000		
Group Fort Macon, NC	215,000		
Group Key West, FL	40,000	50,000	75,000
Group Long Island Sound, CT		250,000	200,000
Group Port Angeles, WA		260,000	200,000
Group Woods Hole, MA		45,000	
Housing Market Surveys		80,000	
ISC Alameda, CA	100,000	240,000	400,000
ISC Boston, MA	260,000		100,000
ISC Honolulu, HI		100,000	350,000
ISC Ketchikan, AK			100,000
ISC Kodiak, AK	480,000	700,000	550,000
ISC Portsmouth, VA	80,000	40,000	100,000
ISC Seattle, WA		85,000	250,000
Minor AC&I Designs—Various Facilities	230,000	497,000	500,000
Misc expenditures $20,000 or less—Various Facilities	320,000	175,000	200,000
MSO Mobile, AL		200,000	100,000
MSO San Juan, PR		300,000	70,000
MSO San Pedro, CA	250,000	96,000	
MSO Valdez, AK		55,000	150,000
Program travel/admin/support	675,000	800,000	800,000
SEC Marianas, Guam			100,000
Station Alexandria, VA			100,000
Station Ashtabula, OH	30,000		
Station Bellingham, WA	25,000		
Station Brunswick, GA		55,000	400,000
Station Channel Island, CA		44,000	
Station Neah Bay, WA	350,000		
Station New Orleans, LA	60,000	270,000	
Station Oswego, NY	65,000		
Station Port Huron, MI	185,000	130,000	250,000
Station Shinnecock, NY	125,000	105,000	160,000
Station St. Petersburg, FL		50,000	70,000
Training Center Cape May, NJ	155,000	300,000	300,000
USCG Yard, Baltimore, MD			300,000
Totals	5,000,000	6,577,000	7,000,000

AC&I PERSONNEL FUNDING INCREASE

Question. The agency is requesting a $3.97 million increase for direct personnel costs. Why is such a large increase necessary?

Answer. The $54.151 million fiscal year 2001 request for direct personnel costs is a $3.97 million increase over the fiscal year 2000 appropriation level. The increase is required to account for additional personnel costs and entitlements such as civilian and military pay increases, Basic Allowance for Housing (BAH) adjustments and increased medical costs. The slight increase also allows for an additional 9.5 Full Time Equivalents (FTE) over the actual fiscal year 2000 level. The increase is required in order to provide for the increased personnel requirements associated

with the National Distress & Response System Modernization, Great Lakes Icebreaker Replacement, and Deepwater projects during fiscal year 2001. These increases are taking place at the same time that other large AC&I projects such as Coastal Patrol Boats, Seagoing Buoy Tender Replacement, and Motor Lifeboat Replacement are in full-scale production.

C&I PERSONNEL INCREASE

Question. How many new personnel are requested?

Answer. The requested funding level will provide for an increase of 9.5 Full Time Equivalents (FTE) over the Coast Guard's fiscal year 2000 actual FTE level.

AC&I PERSONNEL LISTING

Question. Please provide a table listing all personnel funded with AC&I appropriations, similar to the information the Coast Guard provided on pages 806 and 807 of last year's House hearing record.

Answer. Information is attached.

FISCAL YEAR 2000 ACI PERSONNEL

PROJECT	LOCATION	CO	CWO	ENL	CIV	TOTAL	EXPLANATION OF CHANGE
AIREYE PROJECT	HEADQUARTERS	.....	.....	.....	.....	.....	
AVIATION LOGISTICS MGMT INFO SYS	AIRCRAFT REPAIR & SUPPLY CENTER	1	1	.....	.....	2	
AVIATION NEAR TERM SUPPORT STRATEGY	HEADQUARTERS	2	.....	.....	.....	2	First established in fiscal year 1999 as LRSCP reprogrammed to ANTSS billets.
BUOY BOAT (BUSL)	ENGINEERING LOGISTICS COMMAND	.....	.....	3	.....	3	
BUOY BOAT (BUSL)	HEADQUARTERS	1	2	.....	1	4	
BUOY BOAT (BUSL) TOTAL		1	2	3	1	7	Last hull scheduled for FISCAL YEAR 2001 delivery.
COASTAL PATROL BOAT	PROJECT RESIDENT OFFICE BOLLINGER	5	2	8	1	16	
COASTAL PATROL BOAT	ENGINEERING LOGISTICS COMMAND	.....	1	1	.....	2	
COASTAL PATROL BOAT	HEADQUARTERS	7	.....	3	2	12	
COASTAL PATROL BOAT	R&D CENTER	.....	.....	.....	.....	.....	
COASTAL PATROL BOAT TOTAL		12	3	12	3	30	Decreased requirement. Last hull scheduled for FISCAL YEAR 2003 delivery.
COMMUNICATION SYS 2000	MAINTENANCE & LOGISTICS COMMAND (LANT)	1	1	.....	.....	2	
COMMUNICATION SYS 2000	MAINTENANCE & LOGISTICS COMMAND (PAC)	1	1	.....	.....	2	
COMMUNICATION SYS 2000	TISCOM	1	1	.....	.....	2	
COMMUNICATION SYS 2000 TOTAL		3	3	.....	.....	6	3 billets terminated on schedule.
CONFIGURATION MANAGEMENT	HEADQUARTERS	1	1	.....	.....	2	
CONVERSION OF SOFTWARE	HEADQUARTERS	.....	.....	.....	.....	.....	
CONVERSION OF SOFTWARE	OPERATIONS SYSTEMS CENTER	.....	.....	.....	.....	.....	
CORE PROGRAM STAFF	AIRCRAFT REPAIR & SUPPLY CENTER	3	.....	1	1	5	S&D billet est at ARSC.
CORE PROGRAM STAFF	C^2 ENGINEERING CENTER	8	3	1	6	18	
CORE PROGRAM STAFF	ENGINEERING LOGISTICS COMMAND	3	1	16	31	51	
CORE PROGRAM STAFF	FINANCE CENTER	.....	.....	.....	6	6	
CORE PROGRAM STAFF	HEADQUARTERS	28	2	3	65	98	
CORE PROGRAM STAFF	PERSONNEL COMMAND	1	.....	.....	1	2	
CORE PROGRAM STAFF	R&D CENTER	1	.....	.....	2	3	
CORE PROGRAM STAFF	TISCOM	4	.....	2	.....	6	

CORE PROGRAM STAFF	YORKTOWN	.....	.....	.....	4	4	
CORE PROGRAM STAFF TOTAL		48	6	23	116	193	Workload redistribution.
DEFENSE MESSAGE SYSTEM	HEADQUARTERS	1	.....	.....	.....	1	
DEFENSE MESSAGE SYSTEM	TISCOM	4	6	1	1	12	
DEFENSE MESSAGE SYSTEM TOTAL		5	6	1	1	13	
DEEPWATER PROJECT	HEADQUARTERS	44	3	4	20	71	
DEEPWATER PROJECT	ELC	1	.....	.....	2	3	
DEEPWATER PROJECT	DETACHED—MSI	1	.....	.....	.....	1	
DEEPWATER PROJECT TOTAL		46	3	4	22	75	Increased project requirements.
DIFFERENTIAL GPS	HEADQUARTERS	.....	.....	.....	.....	.....	
EDENTON	HEADQUARTERS	.....	.....	.....	.....	.....	
EDENTON	ENGINEERING LOGISTICS COMMAND	.....	.....	.....	.....	.....	
EDENTON—TOTAL		.....	.....	.....	.....	.....	Project phase completed.
ELECTRONIC PLANT RECAP PROJECT	HEADQUARTERS	.....	.....	.....	1	1	
ELECTRONIC PLANT RECAP PROJECT	C^2 ENGINEERING CENTER	.....	1	.....	.....	1	
ELECTRONIC PLANT RECAP PROJECT	TISCOM	.....	1	.....	.....	1	
ELECTRONIC PLANT RECAP PROJECT TOTAL		.....	2	.....	1	3	
FLEET LOGISTICS SYSTEM	HEADQUARTERS	8	.....	1	7	16	
FLEET LOGISTICS SYSTEM	DETACHED—GREENBELT	3	.....	.....	.....	3	
FLEET LOGISTICS SYSTEM TOTAL		11	.....	1	7	19	Scheduled termination of billet.
GLOBAL MARITIME DISTRESS & SAFETY SYS	TISCOM	.....	.....	.....	1	1	
GLOBAL POSITIONING SYSTEM INSTAL	AIRCRAFT REPAIR & SUPPLY CENTER	.....	.....	.....	.....	.....	
GLOBAL POSITIONING SYSTEM INSTAL	HEADQUARTERS	.....	.....	.....	.....	.....	
GREAT LAKES ICEBREAKING CAP REPLACE	HEADQUARTERS	6	.....	.....	5	11	
GREAT LAKES ICEBREAKING CAP REPLACE	ENGINEERING LOGISTICS COMMAND	.....	.....	.....	2	2	

FISCAL YEAR 2000 ACI PERSONNEL—Continued

PROJECT	LOCATION	CO	CWO	ENL	CIV	TOTAL	EXPLANATION OF CHANGE
GREAT LAKES ICE CAP REPLACE—TOTAL		6	.....	.....	7	13	Increased project requirements.
HC–130 ENGINE CONVERSION	AIRCRAFT REPAIR & SUPPLY CENTER	.....	1	.....	1	2	Terminate billet in FISCAL YEAR 2000.
HU–25 AIRCRAFT AVIONICS IMPROV	AIRCRAFT REPAIR & SUPPLY CENTER	1	1	4	.....	6	
HU–25 AIRCRAFT AVIONICS IMPROV	HEADQUARTERS	1	.....	.....	.....	1	
HU–25 AIRCRAFT AVIONICS IMPROV		2	1	4	.....	7	Increased project requirements.
HH–65 KAPTON WIRE/MISSION COMPUTER	AIRCRAFT REPAIR & SUPPLY CENTER	2	1	.....	.....	3	
HH–65 KAPTON WIRE/MISSION COMPUTER	HEADQUARTERS	.....	.....	.....	.....	.....	
HH–65 KAPTON WIRE/MISSION COMPUTER TOTAL		2	1	.....	.....	3	
HH–65 LTS 101 LCC REDUC		1	1	1	.....	3	Additional engine control requirements.
HH–60J INDEPENDENT NAV PROJECT	HEADQUARTERS	.....	.....	.....	.....	.....	
HH–60J INDEPENDENT NAV PROJECT	AIRCRAFT REPAIR & SUPPLY CENTER	.....	.....	1	.....	1	
HH–60J INDEPENDENT NAV PROJECT TOTAL		.....	.....	1	.....	1	
ICEBREAKER RELIABILITY IMPROVEMENT (RIP)	HEADQUARTERS	1	.....	.....	.....	1	
ICEBREAKER RELIABILITY IMPROVEMENT (RIP)	MAINTENANCE & LOGISTICS COMMAND (PAC)	1	1	.....	7	9	
ICEBREAKER RELIABILITY IMPROVEMENT (RIP)	NAVAL ENGINEERING SUPPORT UNIT SEATTLE	2	.....	4	.....	6	
ICEBREAKER RELIABILITY IMPROVEMENT (RIP)	ENGINEERING LOGISTICS COMMAND	1	.....	.....	.....	1	
ICEBREAKER RELIABILITY IMPROVEMENT (RIP) TOTAL		5	1	4	7	17	
ICEBREAKER REPLACEMENT (HEALY)	ENGINEERING LOGISTICS COMMAND	.....	.....	.....	.....	.....	
ICEBREAKER REPLACEMENT (HEALY)	HEADQUARTERS	.....	.....	.....	1	1	
ICEBREAKER REPLACEMENT (HEALY)	PROJECT RESIDENT OFFICE AVONDALE	.....	.....	.....	.....	.....	
ICEBREAKER REPLACEMENT (HEALY) TOTAL		.....	.....	.....	1	1	
LONG RANGE SEARCH	HEADQUARTERS	.....	.....	.....	1	2	Reduced project requirement.
MISLE PROJECT	HEADQUARTERS	7	.....	.....	6	13	
MISLE PROJECT	OPS CENTER	1	.....	.....	.....	1	

MISLE PROJECT TOTAL		8	.....	.....	6	14	Increased project requirements.
MOTOR LIFEBOAT	ENGINEERING LOGISTICS COMMAND	.....	.....	2	.....	2	
MOTOR LIFEBOAT	HEADQUARTERS	4	1	.....	4	9	
MOTOR LIFEBOAT	PROJECT RESIDENT OFFICE TEXTRON	2	2	8	.....	12	
MOTOR LIFEBOAT TOTAL		6	3	10	4	23	Last hull scheduled for fiscal year 2002 delivery.
NATIONWIDE DIFFERENTIAL GPS PROJECT	C^2 ENGINEERING CENTER	.....	.....	.....	.....	.....	
NATIONAL DISTRESS SYSTEM	HEADQUARTERS	10	3	.....	9	22	
NATIONAL DISTRESS SYSTEM	MLC (PAC)	.....	1	.....	1	2	
NATIONAL DISTRESS SYSTEM	MLC (LANT)	1	.....	1	.....	2	
NATIONAL DISTRESS SYSTEM TOTAL		11	4	1	10	26	Increased project requirements.
PORTS & WATERWAYS SAFETY SYS	HEADQUARTERS	3	1	0	9	13	
PORTS & WATERWAYS SAFETY SYS	PROJECT RESIDENT OFFICE NEW ORLEANS	.....	.....	.....	1	1	
PORTS & WATERWAYS SAFETY SYS	District Eight	.....	.....	.....	1	1	
PORTS & WATERWAYS SAFETY SYS TOTAL		3	1	.....	11	15	
SELECTED MAJOR ACQUISITIONS	HEADQUARTERS	1	.....	.....	.....	1	
SELECTED MAJOR ACQUISITIONS	AR&SC	.....	1	.....	.....	1	
SELECTED MAJOR ACQUISITIONS TOTAL		2	1	.....	.....	3	
SHORE CORE PROJECT	CIVIL ENGINEERING UNITS	7	.....	.....	.....	7	
SHORE CORE PROJECT	FACILITIES DESIGN & CONSTRUCTION CEN (LANT)	9	.....	2	50	61	
SHORE CORE PROJECT	FACILITIES DESIGN & CONSTRUCTION CEN (PAC)	8	.....	.....	29	37	
SHORE CORE PROJECT	HEADQUARTERS	1	.....	.....	16	17	
SHORE CORE PROJECT	MAINTENANCE & LOGISTICS COMMAND (LANT)	1	1	2	3	7	
SHORE CORE PROJECT	MAINTENANCE & LOGISTICS COMMAND (PAC)	.....	.....	1	5	6	
SHORE CORE PROJECT TOTAL		26	1	5	103	135	
SURFACE SEARCH RADAR REPL	C^2 ENGINEERING CENTER	1	.....	1	.....	2	
SURFACE SEARCH RADAR REPL	HEADQUARTERS	1	.....	.....	2	3	
SURFACE SEARCH RADAR REPL	COAST GUARD YARD	.....	1	.....	.....	1	

FISCAL YEAR 2000 ACI PERSONNEL—Continued

PROJECT	LOCATION	CO	CWO	ENL	CIV	TOTAL	EXPLANATION OF CHANGE
SURFACE SEARCH RADAR REPL TOTAL		2	1	1	2	6	Last system installed 4th QTR fiscal year 2001.
TRAFFIC COLLISION & AVOIDANCE	AIRCRAFT REPAIR & SUPPLY CENTER	.....	.....	.....	.....	.....	
TRAFFIC COLLISION & AVOIDANCE	HEADQUARTERS	.....	.....	.....	.....	.....	
TRAFFIC COLLISION & AVOIDANCE TOTAL		.....	.....	.....	.....	.....	Project completed.
VHF–FM HIGH–SITE UPGRADE (D–17)	ELECTRONIC SUPPORT DET KETCHIKAN	.....	.....	1	.....	1	
VHF–FM HIGH–SITE UPGRADE (D–17)	INTEGRATED SUPPORT COMMAND KETCHIKAN	.....	.....	2	.....	2	
VHF–FM HIGH–SITE UPGRADE (D–17)	TISCOM	.....	.....	.....	.....	.....	
VHF–FM HIGH–SITE UPGRADE (D–17) TOTAL		.....	.....	3	.....	3	
WLB (SEAGOING BUOY TENDER)	ENGINEERING LOGISTICS COMMAND	.....	1	1	2	4	
WLB (SEAGOING BUOY TENDER)	HEADQUARTERS	12	1	.....	5	18	
WLB (SEAGOING BUOY TENDER)	PROJECT RESIDENT OFFICE MARINETTE	.....	.....	.....	.....	.....	
WLB (SEAGOING BUOY TENDER) TOTAL		12	2	1	7	22	Reduced project requirement.
WLB/WLM (SEAGOING/COASTAL)	HEADQUARTERS	.....	.....	.....	1	1	
WLB/WLM (SEAGOING/COASTAL)	PROJECT RESIDENT OFFICE MARINETTE	15	11	23	.....	49	
WLB/WLM (SEAGOING/COASTAL)	TRACEN PETALUMA	1	.....	.....	1	2	
WLB/WLM (SEAGOING/COASTAL) TOTAL		16	11	23	2	52	Reduced project requirement.
WLM (COASTAL BUOY TENDER)	ENGINEERING LOGISTICS COMMAND	.....	1	2	.....	3	
WLM (COASTAL BUOY TENDER)	HEADQUARTERS	4	.....	.....	2	6	
WLM (COASTAL BUOY TENDER)	PROJECT RESIDENT OFFICE MARINETTE	.....	.....	2	.....	2	
WLM (COASTAL BUOY TENDER) TOTAL		4	1	4	2	11	
WLB/WLM (SEAGOING/COASTAL) Recompete	AIRCRAFT REPAIR & SUPPLY CENTER	.....	1	1	.....	2	
WLB/WLM (SEAGOING/COASTAL) Recompete	ENGINEERING LOGISTICS COMMAND—TEMP	.....	.....	.....	.....	.....	
WLB/WLM (SEAGOING/COASTAL) Recompete	HEADQUARTERS	.....	.....	.....	.....	.....	

WLB/WLM (SEAGOING/COASTAL) Recompete	TISCOM	1	2	.....	.....	3	
WLB RECOMPETE TOTAL	PROJECT RESIDENT OFFICE MARINETTE	1	3	1	.....	5	Second WLB contract award.
TOTAL		237	60	103	316	716	

In an effort to maximize authorized FTP/FTE this plan includes a total of 716 billets/positions, 8 percent above the fiscal year 2000 request of of 663. This plan reflects the fact that many of the billets are partial year FTE and assumes that the historical lapse rate associated with additions/deletions will continue and that any reduction due to unanticipated increase in the fill rate can be realized by postponing fourth quarter adds.

CHANGES TO AC&I PERSONNEL FULL-TIME EQUIVALENT (FTES)

Question. By program, project, and activity, please provide a table indicating the changes from 1999 to 2000 in positions and FTE and the reasons for such changes, similar to the information the agency provided on pages 809 through 811 of last year's House hearing record.

Answer. Information is attached.

FISCAL YEAR 2000/2001 ACI PERSONNEL

PROJECT	LOCATION	FISCAL YEAR 2000 FTP	FISCAL YEAR 2000 FTE	FISCAL YEAR 2001 FTP	FISCAL YEAR 2001 FTE	CHG FTP	CHG FTE	EXPLANATION OF CHANGE
FLIR/RADAR PROJECT	AR&SC							
FLIR/RADAR PROJECT	HEADQUARTERS							
AIREYE PROJECT	HEADQUARTERS							
ALEX HEALY PHASE II	ENGINEERING LOG CMD							
ALEX HEALY PHASE II	HEADQUARTERS							
AVIATION LOGISTICS MGMT INFO SYS	AR&SC	2	2	2	2			
AVIATION NEAR TEAM SUPPORT STRATEGY PROJECT	HEADQUARTERS	2	0.5	2	0.5			
BUOY BOAT (BUSL)	ENGINEERING LOG CMD	3	3	3	3			
BUOY BOAT (BUSL)	HEADQUARTERS	4	4	2	3.75	−2	−0.25	
BUOY BOAT (BUSL) TOTAL		7	7	5	6.75	−2	−0.25	Reduced project requirements
C130 NVG	HEADQUARTERS							
COASTAL PATROL BOAT	PRO BOLLINGER	16	16	16	16.25		0.25	
COASTAL PATROL BOAT	ENGINEERING LOG CMD	2	2	2	2			
COASTAL PATROL BOAT	HEADQUARTERS	12	12	12	12			
COASTAL PATROL BOAT	R&D CENTER							
COASTAL PATROL BOAT TOTAL		30	30	30	30.25		0.25	2 billets extended in fiscal year 2001. No decrease. Full production complete in fiscal year 2003.
COMMUNICATION SYS 2000	MLC (LANT)	2	2	2	2			
COMMUNICATION SYS 2000	MLC (PAC)	2	2	2	2			
COMMUNICATION SYS 2000	TISCOM	2	2	2	2			
COMMUNICATION SYS 2000 TOTAL		6	6	6	6			
CONFIGURATION MANAGEMENT	HEADQUARTERS	2	2	2	2.5		0.5	Increased project requirements—implementation.
CONVERSION OF SOFTWARE	HEADQUARTERS							
CONVERSION OF SOFTWARE	OPERATIONS SYS CENTER							
CORE PROGRAM STAFF	AR&SC	5	5	5	5			
CORE PROGRAM STAFF	C^2 ENGINEERING CENTER	18	18	18	18			

FISCAL YEAR 2000/2001 ACI PERSONNEL—Continued

PROJECT	LOCATION	FISCAL YEAR 2000 FTP	FISCAL YEAR 2000 FTE	FISCAL YEAR 2001 FTP	FISCAL YEAR 2001 FTE	CHG FTP	CHG FTE	EXPLANATION OF CHANGE
CORE PROGRAM STAFF	ENGINEERING LOG CMD	51	51	51	51			
CORE PROGRAM STAFF	FINANCE CENTER	6	6	6	6			
CORE PROGRAM STAFF	HEADQUARTERS	98	98	100	99.25	2	1.25	
CORE PROGRAM STAFF	PERSONNEL COMMAND	2	2	2	2			
CORE PROGRAM STAFF	R&D CENTER	3	3	3	3			
CORE PROGRAM STAFF	TISCOM	6	6	6	6			
CORE PROGRAM STAFF	YORKTOWN	4	4	4	4			
CORE PROGRAM STAFF TOTAL		193	193	195	194.25	2	1.25	Required to support increased AC&I budget.
DEFENSE MESSAGE SYSTEM	HEADQUARTERS	1	1	1	1			
DEFENSE MESSAGE SYSTEM	TISCOM	12	7.75	12	7.75			
DEFENSE MESSAGE SYSTEM—TOTAL		13	8.75	13	8.75			
DEEPWATER PROJECT	HEADQUARTERS	71	56	95	65.75	24	9.75	
DEEPWATER PROJECT	ENGINEERING LOG CMD	3	2.25	3	2.25			
DEEPWATER PROJECT	Detached—MSI	1	1	1	1			
DEEPWATER PROJECT TOTAL		75	59.25	99	69	24	9.75	Phase I Functional Design; Phase II RFP development.
DIFFERENTIAL GPS	HEADQUARTERS							
EDENTON	HEADQUARTERS							
EDENTON	ENGINEERING LOG CMD							
ELECTRONIC PLANT RECAP PROJECT	HEADQUARTERS	1	1	1	1			
ELECTRONIC PLANT RECAP PROJECT	C^2 ENGINEERING CENTER	1	1	1	1			
ELECTRONIC PLANT RECAP PROJECT	TISCOM	1	1	1	1			
ELECTRONIC PLANT RECAP PROJECT TOTAL		3	3	3	3			
FLEET LOGISTICS SYSTEM	HEADQUARTERS	16	11.75	15	10.75	−1	−1	
FLEET LOGISTICS SYSTEM	DETACHED—GREENBELT	3	0.75	3	0.75			

FLEET LOGISTICS SYSTEM TOTAL		19	12.5	18	11.5	−1	−1	Reduced project requirements.
GLOBAL MARITIME DISTRESS & SAFETY SYS	TISCOM	1	1	1	1			
GLOBAL POSITIONING SYSTEM INSTAL	AR&SC							
GLOBAL POSITIONING SYSTEM INSTAL	HEADQUARTERS							
GREAT LAKES ICEBREAKING CAP	HEADQUARTERS	11	8	22	12.25	11	4.25	
GREAT LAKES ICEBREAKING CAP	ENGINEERING LOG CMD	2	2	3	2.25	1	0.25	
GREAT LAKES ICEBREAKING TOTAL		13	10	25	14.5	12	4.5	Increased project requirements.
HC–130 ENGINE CONVERSION	AR&SC	2	2			−2	−2	Reduced project requirements.
HU–25 AIRCRAFT AVIONICS IMPROV	AR&SC	6	6	6	6			
HU–25 AIRCRAFT AVIONICS IMPROV	HEADQUARTERS	1	0.25	1	0.25			
HU–25 AIRCRAFT AVIONICS IMPROV		7	6.25	7	6.25			
HH–65 KAPTON WIRE/MISSION COMPUTER	AR&SC	3	1			−3	−1	
HH–65 KAPTON WIRE/MISSION COMPUTER	HEADQUARTERS							
HH–65 KAPTON WIRE/MISSION COMPUTER TOTAL		3	1			−3	−1	
LTS 101 LCC REDUC		3	3	3	3			
HH60J—INDEPENDENT NAV PROJECT	HEADQUARTERS							
HH60J—INDEPENDENT NAV PROJECT	AR&SC	1	1	1	1			
HH60J—INDEPENDENT NAV PROJECT		1	1	1	1			
ICEBREAKER RELIABILITY IMPROVEMENT (RIP)	ENGINEERING LOG CMD	1	1	1	1			
ICEBREAKER RELIABILITY IMPROVEMENT (RIP)	HEADQUARTERS	1	1	1	1			
ICEBREAKER RELIABILITY IMPROVEMENT (RIP)	M LC (PAC)	9	9	9	9			
ICEBREAKER RELIABILITY IMPROVEMENT (RIP)	NESU SEATTLE	6	6	6	6			
ICEBREAKER RELIABILITY IMPROVE (RIP) TOTAL		17	17	17	17			
ICEBREAKER REPLACEMENT (HEALY)	ENGINEERING LOG CMD							
ICEBREAKER REPLACEMENT (HEALY)	HEADQUARTERS	1	1	1	1.25		0.25	
ICEBREAKER REPLACEMENT (HEALY)	PRO AVONDALE							
ICEBREAKER REPLACEMENT (HEALY) TOTAL		1	0.25	1	0.5		0.25	Project complete; 0.25FTE for logistics wrapup @ HQ.
LONG RANGE SEARCH CAPABILITY PRES	HEADQUARTERS	1	1	1	1			

FISCAL YEAR 2000/2001 ACI PERSONNEL—Continued

PROJECT	LOCATION	FISCAL YEAR 2000 FTP	FISCAL YEAR 2000 FTE	FISCAL YEAR 2001 FTP	FISCAL YEAR 2001 FTE	CHG FTP	CHG FTE	EXPLANATION OF CHANGE
MISLE PROJECT	HEADQUARTERS	13	12.25	8	8.25	−5	−4	
MISLE PROJECT	OPS CENTER	1	1	1	1	.....	.....	
MISLE PROJECT TOTAL		14	13.25	9	9.25	−5	−4	Reduced project requirements.
MOTOR LIFEBOAT	ENGINEERING LOG CMD	2	2	2	2	.....	.....	
MOTOR LIFEBOAT	HEADQUARTERS	9	9	9	11	.....	2	
MOTOR LIFEBOAT	PRO TEXTRON	12	10.5	12	12.25	.....	1.75	
MOTOR LIFEBOAT TOTAL		23	21.5	23	25.25	.....	3.75	Last hull scheduled for fiscal year 2002 delivery.
NATIONAL DISTRESS SYSTEM	HEADQUARTERS	22	16.5	29	18.75	7	2.25	
NATIONAL DISTRESS SYSTEM	TRACEN PETALUMA	.....	.....	.....	.....	.....	.....	
NATIONAL DISTRESS SYSTEM	MLC (PAC)	2	0.75	2	0.75	.....	.....	
NATIONAL DISTRESS SYSTEM	MLC (LANT)	2	0.75	2	0.75	.....	.....	
NATIONAL DISTRESS SYSTEM TOTAL		26	18	33	20.25	7	2.25	Additional project requirements—Phase I eval.
PORTS & WATERWAYS SAFETY SYS	HEADQUARTERS	13	4.75	15	5.5	2	0.75	
PORTS & WATERWAYS SAFETY SYS	PRO NEW ORLEANS	1	1	1	1	.....	.....	
PORTS & WATERWAYS SAFETY SYS	DISTRICT EIGHT	1	1	1	1	.....	.....	
PORTS & WATERWAYS SAFETY SYS TOTAL		15	6.75	17	7.5	2	0.75	Additional project requirements—deployments/surveys.
SELECTED MAJOR ACQUISITIONS	HEADQUARTERS	1	1	1	1	.....	.....	
SELECTED MAJOR ACQUISITIONS	AR&SC	2	0.25	2	0.25	.....	.....	
SELECTED MAJOR ACQUISITIONS TOTAL		3	1.25	3	1.25	.....	.....	
SHORE CORE PROJECT	CIVIL ENGINEERING UNITS	7	7	7	7	.....	.....	
SHORE CORE PROJECT	FD & CC (LANT)	61	61	61	61	.....	.....	

SHORE CORE PROJECT	FD & CC (PAC)	37	37	37	37	.....	.....	
SHORE CORE PROJECT	HEADQUARTERS	17	17	17	17	.....	.....	
SHORE CORE PROJECT	MLC (LANT)	7	6.25	7	6.25	.....	.....	
SHORE CORE PROJECT	MLC (PAC)	6	5.5	6	5.5	.....	.....	
SHORE CORE PROJECT TOTAL		135	133.75	135	133.75	.....	.....	
SIMULATOR ENHANCEMENT PROJECT	ATC MOBILE	.....	.....	.....	.....	.....	.....	
SURFACE SEARCH RADAR REPL	C² ENGINEERING CENTER	2	2	2	2	.....	.....	
SURFACE SEARCH RADAR REPL	COAST GUARD YARD	1	1	1	1	.....	.....	
SURFACE SEARCH RADAR REPL	HEADQUARTERS	3	2.25	3	2.25	.....	.....	
SURFACE SEARCH RADAR REPL TOTAL		6	5.25	6	5.25	.....	.....	
TRAFFIC COLLISION & AVOIDANCE	AR&SC	.....	.....	.....	.....	.....	.....	
TRAFFIC COLLISION & AVOIDANCE	HEADQUARTERS	.....	.....	.....	.....	.....	.....	
VHF–FM HIGH-SITE UPGRADE (D–17)	ESD KETCHIKAN	1	.....	1	.....	.....	.....	
VHF–FM HIGH-SITE UPGRADE (D–17)	ISC KETCHIKAN	2	1	2	1	.....	.....	
VHF–FM HIGH-SITE UPGRADE (D–17)	TISCOM	.....	.....	.....	.....	.....	.....	
VHF–FM HIGH-SITE UPGRADE (D–17) TOTAL		3	1	3	1	.....	.....	
WLB (SEAGOING BUOY TENDER)	ENGINEERING LOG CMD	4	4	4	4.25	.....	0.25	
WLB (SEAGOING BUOY TENDER)	HEADQUARTERS	18	18	17	17	−1	−1	
WLB (SEAGOING BUOY TENDER)	PRO MARINETTE	.....	.....	.....	.....	.....	.....	
WLB (SEAGOING BUOY TENDER) TOTAL		22	22	21	21.25	−1	−0.75	Change is −1.5 FTE to balance increase in WLB recompete for NO net increase.
WLB/WLM (SEAGOING/COASTAL)	HEADQUARTERS	2	2	2	2	.....	.....	
WLB/WLM (SEAGOING/COASTAL)	PRO MARINETTE	49	43.5	45	40.25	−4	−3.25	
WLB/WLM (SEAGOING/COASTAL)	TRACEN PETALUMA	1	1	1	1	.....	.....	
WLB/WLM (SEAGOING/COASTAL) TOTAL		52	46.5	48	43.25	−4	−3.25	Reduced project requirements—last WLB to be delivered fiscal year 2004.
WLM (COASTAL BUOY TENDER)	ENGINEERING LOG CMD	3	3	3	3	.....	.....	
WLM (COASTAL BUOY TENDER)	HEADQUARTERS	6	5.5	3	4	−3	−1.5	
WLM (COASTAL BUOY TENDER)	PRO MARINETTE	2	2	2	2	.....	.....	

FISCAL YEAR 2000/2001 ACI PERSONNEL—Continued

PROJECT	LOCATION	FISCAL YEAR 2000 FTP	FISCAL YEAR 2000 FTE	FISCAL YEAR 2001 FTP	FISCAL YEAR 2001 FTE	CHG FTP	CHG FTE	EXPLANATION OF CHANGE
WLM (COASTAL BUOY TENDER)	R&D CENTER	.....	.....	.....	.....	.....	.....	
WLM (COASTAL BUOY TENDER) TOTAL		11	10.5	8	9	−3	−1.5	Reduced project requirements.
WLB (SEAGOING BUOY TENDER)—RECOMPETE	AR&SC	2	2	2	2	.....	.....	
WLB (SEAGOING BUOY TENDER)—RECOMPETE	ENGINEERING LOG CMD	.....	.....	.....	.....	.....	.....	
WLB (SEAGOING BUOY TENDER)—RECOMPETE	HEADQUARTERS	.....	.....	.....	.....	.....	.....	
WLB (SEAGOING BUOY TENDER)—RECOMPETE	TISCOM	3	2.25	3	2.25	.....	.....	
WLB RECOMPETE TOTAL	PRO TBD AFTER AWARD	5	4.25	5	4.25	.....	.....	Second WLB Contract award.
TOTAL		716	650.5	742	660	.....	.....	

Note: In an effort to maximize requested FTP/FTE, the current plan contains a total of 742 fiscal year 2001 billets/positions, 9.0 percent above the requested number of 704 and a total of 660 FTE. This plan reflects the fact that many of the billets are partial year FTE and assumes that (a) the historical lapse rate associated with additions/deletions will continue to some degree and that (b) any reduction necessary due to unanticipated increase in the fill rate can be realized by postponing fourth quarter adds.

NDRSMP, GLIB and Deepwater project requirements require maximum utilization of AC&I personnel funding.

FISCAL YEAR 2001 ALTERATION OF BRIDGES

Question. What bridges is the Coast Guard proposing to fund with the fiscal year 2001 budget request and at what level of funding?

Answer. The Coast Guard proposes to fund the below list of bridges in fiscal year 2001. Section 101(b) of public Law 104–324 (Coast Guard Authorization Act of 1996) allows for the transfer of funds, by the Secretary of Transportation from the FHWA Discretionary Bridge account to the Coast Guard Bridge Alteration account for highway bridge alterations:

[Dollars in millions]

Name of bridge	Location	Funding
Sidney Lanier Highway	Bridge Brunswick, Georgia	$1
Limehouse Highway Bridge	John's Island, South Carolina	1
Florida Avenue Railroad/Highway Bridge	New Orleans, Louisiana	1
Chelsea Street Bridge	Boston, Massachusetts	1
Burlington Northern Santa Fe Railroad Bridge	Burlington, Iowa	3
Fort Madison Railroad Bridge	Fort Madison, Iowa	2
Elgin, Joliet, and Eastern Railway Company Bridge	Divine, Illinois	1
CSX Transportation Company Bridge	Hurricane, Alabama	1

OBSTRUCTIVE BRIDGES TO NAVIGATION

Question. Please provide a list of all bridges that have been declared obstructions to navigation as well as their location, the estimated total cost of each bridge, and expenditures to date if appropriate.

Answer:

1. Burlington Northern Railroad Bridge located across the Upper Mississippi River at milepost 403.1 in Burlington, Iowa. Estimated total project cost is $32 million and expenditures to date are $777,363.00.

2. Fort Madison Railroad Bridge located across the Upper Mississippi River at milepost 383.9 in Fort Madison, Iowa. Estimated total project cost is $40 million and expenditures to date are $206,518.00.

3. Sidney Lanier Highway Bridge located across the Brunswick River at milepost 4.6 in Brunswick, Georgia. Estimated total project cost is $112 million and expenditures to date are $30,728,000.00.

4. Florida Avenue Railroad/Highway Bridge across the Inner Harbor Navigation Canal at milepost 1.7 in New Orleans, Louisiana. Estimated total project cost is $43 million and expenditures to date are $1,513,455.00.

5. Chelsea Street Bridge across the Chelsea Creek at milepost 1.2 in Boston, Massachusetts. Estimated total project cost is $42 million and expenditures to date are $415,074.00.

6. Limehouse Highway Bridge across the Stono River at milepost 479.3 in Johns Island, South Carolina. Estimated total project cost is $33 million and expenditures to date are $2,536,368.00.

7. Bordeaux Railroad Bridge across the Cumberland River at milepost 185.2 in Bordeaux, Tennessee. Estimated total alteration project cost is $21 million. The Coast Guard decision to alter or remove this bridge is pending. No funds have been appropriated for this project.

8. Elgin, Joliet, and Eastern Railway Company Bridge across the Illinois Waterway at milepost 270.6 in Devine, Illinois. Estimated total project cost is $25 million and expenditures to date are $4,000,000.

9. Union Pacific Railroad Bridge across the Upper Mississippi River at milepost 518.0 in Clinton, Iowa. Estimated total project cost is $26.5 million. No funds have been appropriated for this project.

10. Union Pacific Railroad Bridge across the Illinois Waterway at milepost 151.2 in Pekin, Iowa. Estimated total project cost is $23 million. No funds have been appropriated for this project.

11.Canadian Pacific Rail System Bridge across the Upper Mississippi River at milepost 534.9 in Sabula, Iowa. Estimated total project cost is $20 million. No funds have been appropriated for this project.

12.Gateway Western Railway Company Bridge, across the Upper Mississippi River at milepost 282.1 in Louisiana, Missouri. Estimated total project cost is $21.5 million. No funds have been appropriated for this project.

13.CSX Transportation Company Bridge across the Mobile River at milepost 13.6 in Hurricane, Alabama. Estimated total project cost is $27 million and expenditures to date are $2,000.00.

14. Canadian Pacific Railroad Bridge across the Upper Mississippi River at milepost 699.8 in LaCrosse, Wisconsin. Estimated total project cost is $29 million. No funds have been appropriated for this project.

FUNDING FOR OBSTRUCTIVE BRIDGES

Question. The budget requests to fund these bridges from the Federal-Aid Highways program. Are all of the bridges eligible for funding under the Truman-Hobbs Act also eligible for funding under the Federal-Aid Highways program?

Answer. No, only the highway bridges determined to be unreasonable obstructions to navigation under the Truman-Hobbs Act are eligible for funding from the Federal Aid Highways (FAH) program. Railroad bridges are not eligible under the FAH program.

RETIRED PAY

Question. Is the retired pay appropriation based on an actuarially sound system?

Answer. Yes. Annually, the Coast Guard retains the services of a certified actuary firm to estimate the size of the Coast Guard's liability for retirees. These estimates are used in the process of preparing the Coast Guard's Retired Pay Appropriation Request.

RESERVE TRAINING

Question. What is the shortfall, if any, in the reserve training account for fiscal year 2000?

Answer. As we are currently managing it, there is no shortfall in the Reserve Training account for fiscal year 2000.

SELECTIVE RESERVE STRENGTH

Question. The budget justification indicates that the Coast Guard intends to reduce SELRES strength by 300 to 7,300. I have been informed, however, that the Selected Reserve strength is greater than 8,000 personnel, which would require a reduction of more than 600 personnel to meet the requested funding level. What accounts for this discrepancy?

Answer. As directed in fiscal year 2000 report language, the Coast Guard has made every effort to maintain a Selected Reserve of 8,000 by adjusting the frequency of member drills. The Coast Guard has determined, however, that this policy is less than optimal in the long run and is subsequently adjusting the Selected Reserve to a level that can be fully trained and supported. Furthermore, additional active duty in fiscal year 2000 will relieve some of the Coast Guard's dependence on the Selected Reserve to conduct normal operations and missions.

COAST GUARD PERSONNEL REDUCTION

Question. How does the Coast Guard propose reducing 600 people in one year and what is your schedule?

Answer. The Coast Guard would reduce accessions and offer Reserve personnel voluntary separations. If further reductions are needed, the Coast Guard would pursue involuntary separations of personnel.

RESERVE FUNDING

Question. What would the cost be to fully fund the reserve component at the present strength (about 8,000) at the optimal training level?

Answer. The Coast Guard supports the President's Budget, which supports a Selected Reserve of 7,300. To adequately fund a selected reserve of 8,000 in fiscal year 2001, the Coast Guard Reserve Training (RT) Appropriation would require an appropriation of $79.952,000,000.

OMB STUDY OF COAST GUARD SELECTIVE RESERVE

Question. Does the Coast Guard still agree with the findings of the OMB directed study which concluded that a Selected Reserve of 12,300 is necessary?

Answer. The 1997 Coast Guard Reserve Roles and Missions Study concluded that 12,300 Selected Reserve (SELRES) would be required under specific threat conditions. Under current treat conditions, the Coast Guard supports the President's Request for 7,300 SELRES in fiscal year 2001.

FULL—TIME SUPPORT POSITIONS

Question. The budget justification indicates a reduction of 5 military full-time support billets and 2 civilian FTEs. What are the number of full-time support positions requested for this account and what functions do they perform?

Answer. There are currently 494 Full Time Support positions funded by the Reserve Training Appropriation. Full Time Support personnel perform functions associated with the organization, administration, recruitment, instruction, maintenance, and supply support of the Reserve. Full Time Support billets are deployed where they can optimize and leverage Reserve Component readiness. Coast Guard reservists are largely integrated into active component commands, and perform virtually all Coast Guard functions side by side with their active duty counterparts. The operations-focused deployment of the Coast Guard Selected Reserve requires a similarly broad-focused deployment of Full Time Support structure. These fulltime billets enable Reserve Component readiness in the following areas:

—Attaining and Maintaining Reserve Component Strength (recruiting, medical, personnel and systems support);
—Maximizing the Reserve Component Training (HQ and Training Commands);
—Providing Augmentation Training to Maximize Mobilization Readiness (organic training and administrative support for deployable units, field units/activities); and
—Managing Reserve Force Plans, Policy, Organization and Employment/Deployment (HQ policy/programs and regional force optimization staffs).

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION APPROPRIATION INCREASE

Question. The Coast Guard is requesting an approximately 12 percent increase for the RDT&E appropriation. Why is this increase necessary?

Answer. COLA increases account for $505,000 (2.6 percent) of the $2,327,000 increase over the fiscal year 2000 request to fund increases in pay and support service costs. The rest of the increase is needed to fund new and current research and development (R&D) project work.

The fiscal year 2001 R&D project portfolio was developed to make measurable improvements toward meeting Government and Performance Results Act (GPRA) goals. The increase in project work is needed to pursue three technologies having the potential to significantly improve progress towards Coast Guard performance goals. Three new projects show great potential to improve performance in the Coast Guard's GPRA goals for safety and drug law enforcement.

A "risk management" project will provide the Coast Guard with tools needed to analyze complex, interwoven systems most likely to cause accidents and injuries. A "fatigue countermeasures" project builds on successes to help reduce accidents in hazardous commercial operations such as fishing and towing. New work in "new sensor technology" includes investigation of a variety of airborne, surface, and subsurface sensor systems that provide Coast Guard commanders with real time information about all threats in their area of responsibility.

SEARCH AND RESCUE FUNDING RESEARCH ALLOCATION

Question. Please explain in detail by project or activity how the Coast Guard proposes to allocate the $1.855 million requested for research related to search and rescue. How does this compare to funding provided for fiscal year 2000?

Answer. The Program & Finance Digest (page RDTE–2) provides the Coast Guard's best estimate of that portion of all research proposed for fiscal year 2001 that will contribute to advancing the state of a given mission area. The Program & Finance Digest displays the seven traditional Coast Guard Mission Areas, which do not correlate directly with entries under "Program by activities" on the Line Item Summary exhibit (p. RDTE–8). The Program Digest is a part of every appropriation's budget presentation to provide a consistent view, based on seven traditional Coast Guard missions areas, between very dissimilar appropriations.

The amount requested in fiscal year 2001 for search and rescue is $457,000, which appears on the Line Item Summary exhibit (p. RDTE–8) and on Budget Sheet G1: IMPROVE SEARCH AND RESCUE CAPABILITY (p. RDTE–9). The Budget Sheet explains how the funds requested in fiscal year 2001 will be used. The $457,000 requested is for Search Planning Tool Methodology research and direct project personnel costs. By comparison, the fiscal year 2000 request contained $1.162 million for research related to search and rescue.

AIDS TO NAVIGATION RESEARCH FUNDING ALLOCATION

Question. Please explain in detail by project or activity how the Coast Guard proposes to allocate the $2.577 million requested for research related to aids to navigation. How does this compare to the allocation of funding provided for fiscal year 2000.

Answer. The Program & Finance Digest (p. RDTE–2) provides the Coast Guard's best estimate of that portion of all research proposed for fiscal year 2001 that will contribute to advancing the state of a given mission area. The Program & Finance Digest displays the seven traditional Coast Guard Mission Areas, which do not correlate directly with entries under "Program by activities" on the Line Item Summary exhibit (p. RDTE–8). The Program Digest is a part of every appropriation's budget presentation to provide a consistent view, based on seven traditional Coast Guard missions areas, between very dissimilar appropriations.

The amount requested in fiscal year 2001 for aids to navigation is $1.196 million, which appears on the Line Item Summary exhibit and on Budget Sheet G2: WATERWAYS SAFETY AND MANAGEMENT AND AIDS TO NAVIGATION (p. RDTE–10). The Budget Sheet explains how the funds requested in fiscal year 2001 will be used. The $1,196,000 requested is for research in Advanced Vessel Traffic Systems, International Communications and Navigation Standards, Navigational Aids Mix System Analysis, and for direct project personnel costs. By comparison, the fiscal year 2000 request contained $725,000 for research related to waterways management and safety and aids to navigation.

MARINE SAFETY RESEARCH FUNDING ALLOCATION

Question. Please explain in detail by project or activity how the Coast Guard proposes to allocate the $7.427 million requested for research related to marine safety. How does this compare to the allocation of funding provided for fiscal year 2000?

Answer. The Program & Finance Digest provides the Coast Guard's best estimate of that portion of all research proposed for fiscal year 2001 that will contribute to advancing the state of a given mission area. The Program & Finance Digest displays the seven traditional Coast Guard Mission Areas, which do not correlate directly with entries under "Program by activities" on the Line Item Summary exhibit (p. RDTE–8). The Program Digest is a part of every appropriation's budget presentation to provide a consistent view, based on seven traditional Coast Guard missions areas, between very dissimilar appropriations.

The amount requested in fiscal year 2001 for marine safety is $5.448 million, which appears on the Line Item Summary exhibit (p. RDTE–8) and on Budget Sheet G3: MARINE SAFETY (p. RDTE–11). The Budget Sheet explains how the funds requested in fiscal year 2001 will be used. The $5.448 million requested is for research in Risk-based Planning and Management, Human Error and Human Performance, Fire Safety for Commercial Vessels, and for direct project personnel costs. By comparison, the fiscal year 2000 request contained $3.108 million for research related to marine safety.

MARINE ENVIRONMENTAL PROTECTION RESEARCH FUNDING ALLOCATION

Question. Please explain in detail by project or activity how the Coast Guard proposes to allocate the $2.87 million requested for research related to marine environmental protection. How does this compare to the allocation of funding provided for fiscal year 2000?

Answer. The Program & Finance Digest provides the Coast Guard's best estimate of that portion of all research proposed for fiscal year 2001 that will contribute to advancing the state of a given mission area. The Program & Finance Digest displays the seven traditional Coast Guard Mission Areas, which do not correlate directly with entries under "Program by activities" on the Line Item Summary exhibit (p. RDTE–8). The Program Digest is a part of every appropriation's budget presentation to provide a consistent view, based on seven traditional Coast Guard missions areas, between very dissimilar appropriations.

The amount requested for fiscal year 2001 for marine environmental protection is $1.142 million, which appears on the Line Item Summary exhibit (p. RDTE–8) and on Budget Sheet G5: MARINE ENVIRONMENTAL PROTECTION (p. RDTE–13). The Budget Sheet explains how the funds requested in fiscal year 2001 will be used. The $1,142,000 requested is for research in Spill Response Planning, Management and Training, Aquatic Nuisance Species Control, and for direct project personnel costs. By comparison, the fiscal year 2000 request contained $2,465,000 for research related to marine environmental protection.

ENFORCEMENT OF LAWS AND TREATIES RESEARCH FUNDING ALLOCATION

Question. Please explain in detail by project or activity how the Coast Guard proposes to allocate the $5.80 million requested for research related to enforcement of laws and treaties. How does this compare to the allocation of funding provided for fiscal year 2000.

Answer. The Program & Finance Digest provides the Coast Guard's best estimate of that portion of all research proposed for fiscal year 2001 that will contribute to advancing the state of a given mission area. The Program & Finance Digest displays the seven traditional Coast Guard Mission Areas, which do not correlate directly with entries under "Program by activities" on the Line Item Summary exhibit (p. RDTE–8). The Program Digest is a part of every appropriation's budget presentation to provide a consistent view, based on seven traditional Coast Guard missions areas, between very dissimilar appropriations.

The amount requested for fiscal year 2001 for enforcement of laws and treaties is $4,422,000, which appears on the Line Item Summary exhibit (p. RDTE–8) and on Budget Sheet G6: COMPREHENSIVE LAW ENFORCEMENT (p. RDTE–15). The Budget Sheet explains how the funds requested in fiscal year 2001 will be used. The $4,422,000 requested is for research in Improved Surveillance Capability, Improved Vessel Search Capability, Non-lethal Vessel Disabling Technologies, and for direct project personnel costs. By comparison, the fiscal year 2000 request contained $3,826,000 for research related to enforcement of laws and treaties.

ICE OPERATIONS RESEARCH FUNDING ALLOCATION

Question. Please explain in detail by project or activity how the Coast Guard proposes to allocate the $406,000 requested for research related to ice operations. How does this compare to the allocation of funding provided for fiscal year 2000?

Answer. The Program & Finance Digest provides the Coast Guard's best estimate of that portion of all research proposed for fiscal year 2001 that will contribute to advancing the state of a given mission area. The Program & Finance Digest displays the seven traditional Coast Guard Mission Areas, which do not correlate directly with entries under "Program by activities" on the Line Item Summary exhibit (p. RDTE–8). The Program Digest is a part of every appropriation's budget presentation to provide a consistent view, based on seven traditional Coast Guard missions areas, between very dissimilar appropriations.

There are no funds requested in fiscal year 2001 for research in this specific area, nor were any requested for fiscal year 2000.

DEFENSE READINESS RESEARCH FUNDING ALLOCATION

Question. Please explain in detail by project or activity how the Coast Guard proposes to allocate the $381,000 requested for research related to defense readiness. How does this compare to the allocation of funding provided for fiscal year 2000?

Answer. The Program & Finance Digest provides the Coast Guard's best estimate of that portion of all research proposed for fiscal year 2001 that will contribute to advancing the state of a given mission area. The Program & Finance Digest displays the seven traditional Coast Guard Mission Areas, which do not correlate directly with entries under "Program by activities" on the Line Item Summary exhibit (p. RDTE–8). The Program Digest is a part of every appropriation's budget presentation to provide a consistent view, based on seven traditional Coast Guard missions areas, between very dissimilar appropriations.

There are no funds requested in fiscal year 2001 for research in this specific area, nor were any requested for fiscal year 2000.

RESEARCH AND DEVELOPEMNT PERSONNEL, PROGRAM SUPPORT AND OPERATIONS BREAKDOWN

Question. Please break down in further detail the line, "R&D Personnel, Program Support & Operations" on page RDTE–8 of the budget justification.

Answer. This line item is comprised of:

Administration/Support Personnel & Related Costs	$3,049,000
Support and Operations	1,214,000
Fire and Safety Test Detachment, Mobile, AL Operations and Maintenance	20,000
Total	4,283,000

NATIONAL RECREATIONAL BOATING SAFETY PROGRAM FUNDING

Question. The TEA–21 Act made the appropriation for boat safety mandatory spending and set the level of funding for this important activity for fiscal year 2001 at $64 million, which is the same amount as was provided for fiscal year 2000. Is this level of funding adequate to maintain a national recreational boating safety program or is there a shortfall as some have claimed? If there is a shortfall, what is the amount?

Answer. The minimum funding level for State RBS programs was set in TEA–21 at $59 million per year for fiscal years 1999 through 2003. An additional $5 million for the Coast Guard's national coordination activities is also a component of the TEA–21 formula. This funding is provided through a transfer from the Sport Fish Restoration Account's mandatory appropriation when there is no discretionary funding provided. TEA–21 does not adjust the mandatory funding level to account for inflation or for growth in recreational boating. This level was adequate for the national recreational boating safety program in fiscal year 2000.

QUESTIONS SUBMITTED BY SENATOR BARBARA A. MIKULSKI

COAST GUARD YARD—CORE FACILITY

Question. I'd like to raise the issue of the Curtis Bay Coast Guard Yard with Vice Admiral Card. As you know, the Coast Guard Yard has played a vital role in ensuring the readiness of the Coast Guard fleet through the construction, repair, and renovation of both vessels and aids to navigation peculiar to the Coast Guard.

The Yard provides essential capabilities that are simply not available in commercial shipyards. Those capabilities include the Yard's instant response for emergency and non-emergency work, special ordnance and electronic repair expertise, instant ability to obligate funds without pre- and post-contract requirements and delays, and no-risk performance guarantees. Without the help of the Yard, the Coast Guard would be unable to maintain its fleet and therefore unable to meet its mission of saving lives.

Do you consider the Curtis Bay Coast Guard Yard to be a Core Logistics Facility?

Answer. Yes. In response to requirements outlined by the Coast Guard Authorization Act of 1988, the Secretary of Transportation provided a list of "essential logistics" activities. The Coast Guard Yard is on that list. The Yard remains an essential component to meet Coast Guard support requirements for our fleet.

COAST GUARD YARD POLICY STATEMENT

Question. If so, will you state that the Curtis Bay Coast Guard Yard is a Core Logistics Facility in the policy statement that is currently being developed by Headquarters?

Answer. Yes, the Coast Guard will reaffirm the essential nature of the Yard in our new policy statement. Over the past 100 years, the Yard has adapted to significant changes and challenges the Coast Guard has faced. The Yard's flexibility is a key component of its value to the Coast Guard. The Coast Guard continues to evaluate how the Yard can best meet the needs of the fleet and also lend its expertise to other government agencies. The Coast Guard's assessment in this regard is a continuous process and includes accounting for changes in its fleet size and opportunities for new business.

REFURBISHING USCGC MACKINAW

Question. Also, is the Coast Guard giving serious consideration to refurbishing the Great Lakes Icebreaker at the Curtis Bay Coast Guard Yard?

Answer. The Coast Guard intends to replace (not refurbish) Coast Guard Cutter MACKINAW with a new construction multipurpose icebreaker.

The Coast Guard has determined that a competitive procurement is the most appropriate strategy to achieve performance, cost, and schedule objectives. Market surveys conducted by the Coast Guard reflect significant commercial interest in this acquisition.

USCGC MACKINAW REFURBISHMENT DECISION TIMELINE

Question. When will the Coast Guard decide where the Great Lakes Icebreaker will be refurbished?

Answer. The Coast Guard intends to replace (not refurbish) Coast Guard Cutter MACKINAW with a new construction multipurpose icebreaker. The Coast Guard in-

tends to award a commercial contract to design and build the Great Lakes Icebreaker during the third quarter of fiscal year 2001.

AIR–21 IMPACT

Question. Admiral Card, as you know, the Senate and the House currently are conferencing on the so-called AIR–21, the FAA reauthorization bill. One of the areas that remains unresolved is the issue of budgetary treatment for aviation programs. The House has proposed to create a firewall that would guarantee both trust funds revenues as well as general tax revenues for aviation programs. What impact would the House's budgetary treatment proposal have on Coast Guard safety programs?

Answer. AIR–21 mandates large increases for FAA capital spending under the budget caps, making it more difficult to fund other discretionary programs, including the Coast Guard. Nevertheless, safety programs are a core mission which we will attempt to protect and we will continue to seek your support for the funding levels for the Coast Guard requested in the President's Budget.

QUESTIONS SUBMITTED TO THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

NHTSA MAJOR CONTRACTORS

Question. Please provide a list of NHTSA's major contractors, what projects they are working on, and the cost of each contract.

Answer. A list of NHTSA's major contractors' follows.

Contractor	*Amount*
TRW, San Diego, CA 92198: DTNH22–94–C–07125—National Advanced Driving Simulator	$12,440,000
General Motors Corporation, Warren, MI 48090: DTNH22–99–H–07019—Automotive Collision Avoidance System (ACAS) Field Operational Test	8,374,013
CALSPAN Corporation, Buffalo, NY 14225:	
DTNH22–93–C–07024—Intersection Collision Avoidance Using IVHS Countermeasures	249,998
DTNH22–93–C–07034—Operation of Zone Center #1 for the NASS	3,343,463
DTNH22–94–D–07058—Establishment of Special Crash Investigative Teams	388,948
DTNH22–95–D–11000—Multiple FMVSS Compliance Testing	36,800
DTNH22–96–D–02010—Composite Crash Testing for New Car Assessment Program (NCAP)	292,034
Total	4,311,243
KLD Associates, Inc., Huntington Station, NY 11746:	
DTNH22–93–C–07035—Operation of Zone Center #2 for the NASS	3,150,000
DTNH22–95–C–02029—Analysis of Insurer Reports Rec'd. Pursuant to Chapter 331 of 49 U.S.C.	43,618
Total	3,193,618
Signal Corporation, Fairfax, VA 22031: DTNH22–96–D–01049—Information Technology Support	3,118,132
Information Systems & SVCS., Inc., Silver Spring, MD 20910:	
DTNH22–95–D–07159—Base Level On-Going Technical Support & Indefinite Technical Services	2,246,848

Contractor	*Amount*
DTNH22–97–C–07000—ADP Support for NHTSA Data Center	763,132
Total	3,009,980
Information Management Consultants, McLean, VA 22102: DTNH22–96–D–03100—OIRM Information Technology Technical Support	2,540,566
National Safety Council, Itasca, IL 60611:	
DTNH22–93–Y–05240—National Safety Belt Coalition	551,470
DTNH22–94–Z–05063—Traffic Safety Rap Contest	43,935
DTNH22–96–H–05243—Technical Assistance for Occupant Protection	645,000
DTNH22–97–H–05015—Third Annual "Strides For Safety" Campaign	79,106
DTNH22–97–H–05278—Research, Evaluation and Traffic Records Initiatives and Support	945,565
Total	2,265,076
Information Dynamics, Inc., Washington, D.C. 20024: DTNH22–97D–07008—ADP Support for FARS and NCSA LAN Operations	1,304,465
Capital Consulting Corporation, Fairfax, VA 22031:	
DTNH22–93–D–07192—Computerized Quality Assurance, QC & Stat. Support Services	67,974
DTNH22–94–C–01043—Hotline Contact Representatives/Transcribers	720,000
DTNH22–99–D–07009—Computerized Quality Assurance, Quality Control, And Statistical Support Services	497,601
Total	1,285,575
University of Michigan Transportation Research Institute, Ann Arbor, MI 48109:	
DTNH22–94–Y–47016—Foster the Development, Evaluation, and Deployment Of Collision Avoidance Systems	296,000
DTNH22–97–D–25018—Evaluations Support of Traffic Safety Programs	50,000
DTNH22–99–H–07003—System for Assessing the Vehicle Motion Environment	788,103
Total	1,134,103
Enterprise III Systems, Reston, VA 22091: DTNH22–97–C–03004—Imaging Network Support &Scanning Services	1,133,340
University of Alabama, Birmingham, AL 35294: DTNH22–99G–05139—Model State Head Injury Program	1,000,000
Louisiana Highway Safety Commission, Baton Rouge, LA 70806: DTNH22–99–H–15132—Targets of Opportunity: State Demo. & Eval. Pgm. To Reduce Alcohol Related Crashes	1,000,000
Financial Technologies Inc., Chantilly, VA 22021: DTNH22–98–C–05000—Teleprocessing for the National DriverRegister (NDR)	992,968
Tennessee Governor's Office of Highway Safety, Nashville, TN 37243:	
DTNH22–99–H–07159—Crash Outcome Data Evaluation System	300,037

Contractor	*Amount*
DTNH22–99–H–25132—Targets of Opportunity: State Demo. & Eval. Pgm. To Reduce alcohol Related Crashes	600,000
Total	900,037
University of Virginia, Charlottesville, VA 22906: DTNH22–93–Y–07028—Biomechanical Response of Human Surrogates to Impact	900,000
Internat'l Assoc. of Chiefs of Police, Alexandria, VA 22314: DTNH22–96–G–05235—IACP Traffic Enforcement Initiatives	879,810
Global Exchange, Inc., Bethesda, MD 20814:	
DTNH22–95–D–05152—Public Information Technical Assistance	479,293
DTNH22–97–F–05125—Roundtable on EMS & Managed Care	29,956
DTNH22–98F–05335—Aggressive Driving Summit Logistics	140,000
DTOS59–95–C–00408—IQC for Conference/Media Support	229,923
Total	879,172
Conwal, Inc., McLean, VA 22101:	
DTNH22–98–C–05007—Operation of, and Information Retrieval Support for, the Traffic Safety Pgm. Resource Center	693,601
DTNH22–99–P–09019—TSD: Database Documentation of Innovative State & Community Highway Safety Projects	85,000
DTNH22–99–P–09036—TSD: Database Documentation of Innovative State & Community Highway Safety Projects	21,996
Total	800,597

NHTSA REPROGRAMMINGS

Question. Please provide the amount and description of all reprogrammings or transfers of funds that occurred during fiscal year 1999 and thus far in fiscal year 2000.

Answer. In fiscal year 1999, NHTSA received Congressional approval to reprogram $2.35 million from the Research and Analysis and the Highway Safety programs for the National Advanced Driving Simulator. The reprogrammed funds were used to fund unanticipated cost overruns. Without the reprogrammed funds, the program would have been delayed or work would have stopped, causing greater delays to the program. In fiscal year 2000, there have been no reprogramming actions to date. Any funding shifts have been minor and represent minor but necessary fine-tuning which typically takes place when the agency implements its budget.

UNOBLIGATED BALANCES

Question. Please provide a list of any unobligated funds and carryover funds by subaccounts from previous fiscal years.

Answer. In the Operations and Research appropriation, an unobligated balance of $8.669 million was brought forward and made available for use in fiscal year 2000. This represents 5.4 percent of the total funds available for spending in fiscal year 1999. Approximately 30 percent of the carryover funding ($2.617 million) is earmarked for the ITS program. The following is a listing of unobligated balances brought forward:

[In thousands of dollars]

Salaries and Benefits	615
Headquarters and Regional Operating Expenses	291
Contract Program:	
Safety Performance	160
Safety Assurance	409
Highway Safety	261
State and Community Services	20
Research and Development	6,102

General Administration	53
Miscellaneous	758
Total	8,669

Salaries and Benefits.—Carryover resulted from delays in hiring and will be applied to the fiscal year 2000 personnel costs.

Headquarters and Regional Operating Expenses.—This amount comprises carryover from both field and headquarters operating expenses and was the result of underruns in telecommunications costs.

Safety Performance.—Carryover is associated with contract underruns and will be applied to the Vehicle Safety and Consumer Standards Program.

Safety Assurance.—Carryover is associated with underruns in compliance testing. Highway Safety—Carryover is associated with underruns in various programs.

State and Community Services.—Carryover is associated with underruns in various programs and will be applied to the Buckle Up America program.

Research and Development.—$2.617 million is earmarked for the ITS program and resulted from delays in awards of ITS procurements; the remaining $3.485 million resulted from delays in contract awards and testing delays in the areas of Motor Vehicle Research ($1.185 million), Biomechanics ($.6 million), Crash Avoidance ($.3 million), and Heavy Vehicles ($.4 million). In addition, carryover resulted from delays in contract awards in NCSA ($.6 million), PNGV ($.4 million). Carryover will be applied to complete the awards and testing originally planned.

General Administration.—Carryover is associated with underruns in various programs.

Miscellaneous.—Unallocated deobligations from prior years totaled $758,000. Funds will be used to cover shortfalls in various operating expenses and unanticipated intermodal reimbursable agreements.

NHTSA REGULATIONS

Question. Please prepare a list of all final rulemakings that have been issued since last year.

Answer. Below is a list of all final rulemakings that have been issued since April 1, 1999 through April 5, 2000:

Standard Part No.	Description
105	In response to a petition for rulemaking, the agency corrected Table II—Stopping Distances, which contains the applicable stopping distance requirements that was published in the final rule on March 10, 1995 (9/7/99—64 FR 48562).
105;135	In response to petitions for reconsideration, the agency is allowing regenerative braking for electric vehicles (EV) to facilitate new technology in the braking system of an EV (2/9/00—65 FR 6327).
108	In response to a petition for rulemaking, the agency is allowing manufacturers of motor vehicles with headlamp concealment devices to choose between complying with the existing provisions, or with a new provision incorporating by reference the United Nations Economic Commission for Europe's standard (ECE standard) on those devices (8/23/99—64 FR 45895).
201	In response to petitions for reconsideration, the agency deletes a humidity range specification for calibration of the test device used in the car-to-pole test (12/14/99—64 FR 69665).
209	Deletes the provision requiring that the lap belt portion of a safety belt system be designed to remain on the pelvis under all conditions (5/19/99—64 FR 27203).
216	In response to petitions for rulemaking, revises the test procedure to make it more suitable to testing vehicles with rounded roofs or vehicles with raised roofs (4/27/99—64 FR 22567).
216	Partial response to petitions for reconsideration, the agency extends the effective date of the April 1999 final rule to 10/25/00 to make the roof crush resistance more suitable to testing motor vehicle with raised roofs (1/31/00—65 FR 4579).
221	Partial response to petitions for reconsideration, the agency extends the effective date of the November final rule to 5/5/01 to reduce deaths and injuries resulting from the structural collapse of school bus bodies during crashes (3/6/00—65 FR 11751).

Standard Part No.	Description
225	In response to several petitions for reconsideration, the agency is allowing vehicle manufacturers to meet alternative requirements during an initial several year period (8/31/99—64 FR 47566).
531	Provides a procedure by which a vehicle manufacturer may notify the agency of the model year (MY) in which it elects to consider production of components and automobile assembly in Mexico as domestic value added (5/19/99—64—27201).
533	Establishes the average fuel economy standard for light trucks manufactured in model year (MY) 2001 which is identical to the standard for MY 2000, 20.7 mpg (4/7/99—64 FR 16860).
533	Establishes the average fuel economy standard for light trucks manufactured in model year (MY) 2002 which is identical to the standard for MY 2001, 20.7 mpg (4/5/00—65 FR 17776).
572	Establishes design and performance specifications for a more advanced 6-year-old Hybrid III test dummy (1/13/00—65 FR 2059).
572	Establishes design and performance specifications for a more advanced fifth percentile Hybrid III test dummy (3/1/00—65 FR 10961).
572	Establishes design and performance specifications for a more advanced 3-year-old Hybrid III test dummy (3/22/00—65 FR 15254).
572	Establishes design and performance specifications for a more advanced 12-month-old Hybrid III test dummy (CRABI) (3/31/00—65 FR 17180).
574	In response to a petition for rulemaking, the agency amended the standard to allow the date to be expressed in 4 digits instead of 3 and reduced the minimum size of the digits from 6 millimeters (mm) (¾ inch) to 4 mm (5/32 inch) (7/8/99—64 FR 36807).
575	In response to a petition for rulemaking, rescinds the requirement that passenger car manufacturers provide general uniform tire quality grading standard (UTQGS) information to purchasers and potential purchasers at the point of sale of new vehicles requiring instead that such information be included in owner's manual (5/24/99—64 FR 27921).
575	In response to a petition for reconsideration, the agency is allowing manufacturers: to combine the rollover and air bag alert labels in one label; to comply with either of two options for installing both labels on the same side of the sun visor until September 1, 2000; and voluntarily install on the same side of the sun visor as the air bag label, rollover warning labels in vehicles for which they are not required (8/30/99—64 FR 47119).
575	In response to petitions for reconsideration, the agency is staying with the requirement for the inclusion of UTQGS information in the owner's manual for one year until 9/1/00 (9/27/99—64 FR 51920).
583	The agency extended the effective date of the Automobile Parts Content Labeling requirements to June 1, 2000, while permitting optional early compliance (7/28/99—64 FR 40777).
587	Adds specifications for an offset deformable barrier used in offset deformable barrier test to evaluate the crashworthiness of vehicles (65 FR 17196).

Question. What is the number and nature of the major notices of proposed rulemaking that NHTSA has published in the Federal Register in the last 12 months.

Answer. Below is a list of the six notices of proposed rulemaking published in the Federal Register from April 1, 1999 through April 5, 2000:

Standard Part No.	Description
121	The agency is proposing that the braking-in-a-curve dynamic performance test requirement apply to single-unit trucks and buses that are required to be equipped with antilock braking systems (12/21/99—64 FR 71377).
122	In response to a petition for rulemaking, the agency is proposing to reduce the minimum hand lever force from five pounds (presently specified to 2.3 pounds) and the minimum foot pedal force from 10 pounds (presently specified to 5.6 pounds) in the fade recovery and water recovery tests (11/17/99—64 FR 62622).
201	The agency is proposing to modify the minimum distance between certain target points on vertical surfaces inside a vehicle (4/5/00—65 FR 17842).

Standard Part No.	Description
205	In response to a petition for rulemaking, the agency is proposing to update the standard on glazing materials so that it incorporates by reference the 1996 version of the industry standard on motor vehicle glazing (8/4/99—64 FR 42330).
401	The agency is proposing the requirement that all new vehicles with trunks come equipped with a release latch inside the trunk compartment beginning January 1, 2001 (12/17/9—64 FR 70672).
575	In response to a petition for rulemaking, the agency is proposing to amend our consumer information regulations to require seat belt positioners to be labeled as not suitable for children for a certain age, e.g., under 6-year-old, or of a certain height (8/13/99—64 FR 44164).

TEA–21 AUTHORIZED FUNDING LEVEL

Question. Under TEA–21, as amended, what is the authorized level of funding for NHTSA for fiscal year 2001?

Answer. TEA–21 authorized a total of $402.376 million for NHTSA. The authorization is as follows:

[Dollars in millions]

Motor Vehicle Safety Act	$98.314
Motor Vehicle Information & Cost Savings Act	9.562
National Driver Register	2.000
Highway Safety R&D (Section 403)	72.000
Section 2003(b) Child Passenger Protection	7.500
Highway Traffic Safety Grants	213.000
Total Authorized	402.376

Question. Does NHTSA's budget request for fiscal year 2001 comport with the authorization act? If not, please submit to the Committee a revised budget request that matches the authorized level of funding.

Answer. NHTSA's budget request exceeds the authorized levels by $97.1 million. However, NHTSA has asked for an increase of $35 million to the authorizing legislation. NHTSA does not propose to revise its budget request and encourages the Congress to support the full amount requested for NHTSA in the Presidents Budget.

SAFETY STANDARDS SUPPORT FUNDING

Question. Please break out how the funds for safety standards support are expected to be used by rulemaking during fiscal year 2001 and compare activities and funding amounts to the fiscal year 2000 spending plan. Which rulemakings require additional analysis?

Answer. The following chart compares safety standards support activities and funding amounts between fiscal year 2001 and fiscal year 2000.

Safety standards support activity	Fiscal year 2000 enacted	Fiscal year 2001 request
Crashworthiness	$293,000	$671,000
Fiscal year 2000—Funding is targeted for testing or studies relating to frontal offset and side impact crashes, improved dummy necks, head restraints, advanced air bags, door lock retention, and motorcycle helmet strength.		
Fiscal year 2001—Funding will be used on projects relating to frontal offset crash safety, improved child seats, child protection in school buses crashes, side impact protection, upgraded roof-crush protection and fuel system integrity.		
Crash Avoidance	315,000	1,037,000

Safety standards support activity	Fiscal year 2000 enacted	Fiscal year 2001 request
Fiscal year 2000—Funding is targeted for testing or studies relating to tire safety, motorcycle braking, and collecting data on adaptive equipment for the disabled population.		
Fiscal year 2001—Projects will cover safety issues such as light vehicle and heavy truck braking, tire safety, light vehicle rollover propensity, trunk entrapment and continued work relating to adaptive equipment for the disabled population.		
Consumer Information Program	100,000	0
Fiscal year 2000 funds allocated to consumer information activities.		
Total	708,000	1,708,000

Of the activities listed for fiscal year 2001, the significant rulemaking projects carried over from fiscal year 2000 which require additional analysis and safety standards support funding include frontal offset and side impact protection, and light vehicle braking. Although not in support of a specific rulemaking, carryover funding is required to continue work begun on a non rulemaking project to collect data on adaptive vehicles for the disabled population.

SAFETY PERFORMANCE PROGRAM FUNDING

Question. NHTSA is proposing to increase funding for the Safety Performance Standards program by more than 100 percent. Why is this large increase necessary?

Answer. This large increase for the Safety Performance Standards program is necessary to accomplish goals in the following areas.

Safety Standards Support

Funding will be used to support the following activities:

—Based on the outcome of the current school bus occupant protection research, develop test procedure to support rulemaking action to amend the school bus occupant protection safety standard;

—Continue the agency's efforts to improve child seat safety; and develop, through testing and evaluation, a revised FMVSS No. 213 test procedure, specifically with respect to design and development of a bench seat fixture that is more representative of the seat geometry for the current vehicle fleet and other associated concerns;

—Continue agency information collection on vehicles that have been adapted for the disabled population. Very little centralized data exists on the number and types of vehicle modifications and adaptive equipment installations done to accommodate persons with disabilities. This lack of data hampers NHTSA's efforts to determine the size of the modified vehicle fleet, whether vehicles are made safely, and whether the consumers of the equipment and modifications are experiencing any particular problems, particularly those that might lead to crashes or injuries;

—Assess the capability of Electronically Controlled Braking Systems (ECBS) to improve braking performance for heavy trucks and buses. As part of this effort, the agency plans to conduct test track evaluations and operational (fleet test) evaluations on ECBS-equipped vehicles;

—Continue development of test procedures for offset frontal testing;

—Develop through testing and evaluation, a more appropriate test for bead unseating of radial tires. This harmonization activity is in response to a petition from six tire manufacturers. The petition requested the agency to begin rulemaking to amend its federal motor vehicle safety standard for passenger car tires (FMVSS No. 109) to conform to a proposed new Global Tire Standard 2000 (GTS–2000) that has been developed by tire manufacturers around the world. However, NHTSA's testing has shown that tires can separate from light car and truck wheels during hard maneuvering;

—Cost weight and lead time studies to support key rulemaking actions in the areas of upgraded roof crush protection, side impact protection, advanced electronic braking systems for trucks, fuel system integrity, and child protection in school bus crashes.

New Car Assessment Program

One in four e-mails to the agency's crash test website is from an unhappy consumer who cannot find safety information on the vehicle he or she wants to purchase. In 2000, the agency provided safety information on 72 percent of vehicles sold. The agency needs increased funding for fiscal year 2001 frontal and side impact testing to cover 80–90 percent of new vehicles for these most common crash modes. The increase would raise consumer information to the 1997 fleet coverage level of 86 percent.

Additional funding is necessary to add small size dummy tests to NCAP. Distributions of trauma in real world crashes suggest that short stature occupants have as great a risk of injury as mid-size occupants. Also, the 10–15 crash tests for fiscal year 2001 using the small stature dummy in the driver and passenger positions will test the feasibility of using the 5th percentile female dummy in frontal crash tests, to supplement the information gathered with the 50th percentile male dummy.

In response to calls for a broader range of vehicle safety consumer information, a demonstration project will conduct tests that will provide information on the braking performance of passenger cars and light trucks. In addition, support is needed for the development of test protocols for rating the headlighting performance of new vehicles.

Consumer Information Program

Additional funding is necessary to expand our consumer information activities in an effort to motivate manufacturers to improve the safety of their vehicles and to further aid consumers with their purchasing decisions. Funding will be used for new requirements and to sustain and expand present activities and programs to meet the recommendations of the National Academy of Science's 1996 Special Report, *Shopping for Safety: Providing Consumer Automotive Safety Information.*

The fiscal year 2001 program will use increased funding for consumer research to support emerging issues, such as child safety seat labeling, and expanding NCAP ratings and information (such as a summary rating score). Increased funding will allow the agency to produce more information products to meet the increasing demand for existing publications and materials, which we presently cannot meet. At the same time, the agency will undertake efforts to increase the content and improve the quality of existing materials. Resources also are necessary to sustain the growing needs of partnerships that we have established to promote vehicle safety information (AAA, Goodyear, Jiffy Lube, Championship Auto Racing Teams, etc.) and to cultivate new partnerships with other organizations.

CONSUMER INFORMATION PROGRAMS

Question. How much is spent on consumer-related information activities in fiscal year 2000 using NCAP funds or other agency funds?

Answer. Safety Performance Standards' consumer-related activities are currently funded using $247,000 of NCAP and $100,000 of Safety Standards Support funds.

Question. What is the basis for the amount requested in fiscal year 2001 for consumer-related information programs?

Answer. The basis for the requested budget for consumer information programs in fiscal year 2001 is a combination of new requirements, and the need to sustain and grow current activities and programs to meet the recommendations of the National Academy of Science's 1996 Special Report, *Shopping For Safety: Providing Consumer Automotive Safety Information.* The study recommended that NHTSA broaden the scope of the information it provides to consumers, improve the presentation of the information, and expand the dissemination of the information. Further, increasing consumer awareness and demand for vehicle safety information also substantiates the need for greater resources. For instance, the New Car Assessment Program (NCAP) web site hits have increased from 1,100 per month when the site was created in 1996 to over 33,000 presently. In the most recent NHTSA Customer Satisfaction Survey, 76 percent of the respondents rate safety as "very important" in their selection of a motor vehicle for purchase.

The fiscal year 2001 program will utilize increased funding for consumer research to support emerging issues, such as child safety seat labeling, and expansion of NCAP ratings and information, such as a summary rating score. Larger volumes of products will be produced to meet the increasing demand for existing publications and materials, which we presently cannot meet. At the same time, efforts to increase the content and improve the quality of existing materials will be undertaken. Resources are also necessary to sustain the growing needs of partnerships that have been established to promote vehicle safety information (AAA, Goodyear, Jiffy Lube,

Championship Auto Racing Teams, etc.) and to cultivate new partnerships with other organizations.

Question. If the consumer information activity were increased by $.5 million from the fiscal year 2000 enacted level, what additional activities would be funded?

Answer. At a reduced level of effort, funding would be used for the following activities: Conduct research for child safety seat labeling issues to determine how to best present new or revised warnings and information to child safety seat users.

—Conduct research to determine how to best develop and present new or revised vehicle safety information required by rulemakings, and how to most effectively disseminate this information. This includes warning labels and owner's manual information.

—Develop new research-based information for development of new campaigns and materials on high interest issues, such as air bags, rollover, antilock brakes, adapted vehicles, and other emerging issues. Use research results to upgrade and improve existing publications, the web-site, and marketing strategies.

—Develop and deliver NCAP and other vehicle safety information more effectively through new and enhanced materials such as brochures and pamphlets, mass media campaigns, and electronic media materials. Increase the quantities of the annual Buying A Safer Car and Buying A Safer Car for Child Passengers, and other brochures to meet public demand.

—Develop and deliver new comparative vehicle safety information on braking performance. Facilitate the public's understanding of the information and its value in making vehicle purchase decisions.

—Develop diversity initiatives and materials to better reach underserved populations.

—Continue and increase the leveraging effect of federal spending to meet the requirements of participation in existing partnerships and expand outreach efforts to new partners and constituents in order to increase the marketing and dissemination of consumer information materials.

NEW CAR ASSESSMENT PROGRAM (NCAP)

Question. If funding for the NCAP were increased by $1.0 million from the fiscal year 2000 enacted level, how many more vehicles would be tested? With this amount of funding, what is the percentage of vehicles in the U.S. fleet about which we would have frontal impact and side impact safety information?

Answer. With a funding increase of $1.0 million over fiscal year 2000, NHTSA would crash about twenty additional vehicles in model year 2001. NHTSA had safety information on 72 percent of new vehicles sold in the U.S. in model year 2000. With an additional $1 million in fiscal year 2001, NHTSA would have safety information on 79 percent versus the 85 to 90 percent that could be achieved at the fiscal year 2001 requested level.

Question. Assuming a funding level for NCAP below the fiscal year 2001 budget request, what would NHTSA's priorities be in terms of conducting additional frontal crashes, additional side crashes, or testing smaller crash dummies?

Answer. NHTSA would first reduce the number of frontal and side crashes by the same amount. As we drop frontal and side crashes, the fleet coverage would decrease. The fleet coverage would fall from a high of 85–90 percent of the vehicles sold in the U.S. in 2001. (NHTSA assumes coverage of 85–90 percent of the fleet if the fiscal year 2001 budget request were to be approved.) Once the percentage of fleet coverage fell to 80 percent, NHTSA would cease dropping frontal and side tests. At the 80 percent level, testing with the smaller crash dummy would be reduced.

Question. How many 6-year-old Hybrid III and 5th percentile female dummies does NHTSA need to acquire and calibrate? How much will it cost to procure and calibrate small stature dummies?

Answer. NHTSA needs five 6-year-old Hybrid III dummies and six 5th percentile female Hybrid III dummies. To purchase five instrumented 6-year-old dummies and do one calibration per dummy would cost roughly $173,000. To purchase six instrumented fifth percentile female Hybrid III dummies and do one calibration per dummy would cost roughly $249,000.

Question. The agency's budget requests a $1 million increase for safety standards support. Please explain how NHTSA proposes to allocate the additional funds.

Answer. Additional funds for safety standards support will be used to support the following activities:

—To continue the agency's efforts to improve school bus safety;

—To continue efforts to improve the child seat safety;

—To continue agency data information collection on vehicles that have been adapted for the disabled population;
—To assess the capability of Electronically Controlled Braking Systems for heavy trucks and buses;
—To continue development of test procedures for offset frontal testing;
—To address the issue of increased glare from headlamps and other front mounted lamps;
—To develop a more appropriate test procedure for bead unseating of radial tires; and
—To support cost and lead time work in support of several priority rulemaking actions.

Question. Please explain how you would allocate additional funding if the contract funding for safety standards support were increased by $.5 million.

Answer. If the agency were to receive $.5 million for safety standards support, the additional funds would be used to support our efforts to improve child seat safety, heavy truck brakes, frontal off-set testing and tire safety.

SAFETY DEFECTS INVESTIGATION PROGRAM

Question. How many safety defect investigations has NHTSA initiated each year over the past five years that led to a vehicle or equipment recall?

Answer. [The information follows:]

NUMBER OF DEFECT INVESTIGATIONS WHICH RESULTED IN RECALLS

Year in which investigation began	Vehicle investigations	Equipment investigations
1995	48	11
1996	63	10
1997	31	10
1998	65	5
1999	55	4
Total	262	40

The vehicle investigations and equipment investigations in the above table reflect the number of investigations opened in the specified investigation year and not necessarily the year in which the recall occurred. As additional recalls are initiated, the numbers in the above table may increase slightly for investigation year 1998 and significantly for investigation year 1999.

VEHICLE SAFETY COMPLIANCE

Question. Please explain how you would allocate the additional funds requested if the contract funding for the vehicle safety compliance program were increased by $1.0 million and $2.0 million.

Answer. The fiscal year 2001 budget request includes $5,000,000 for current services and $2,245,000 for increased funding. The increased funding would cover the following: $675,000 to return the agency's compliance test program of full-scale vehicle crash testing to the prior year level, $1,160,000 to purchase 16 new crash test dummies for advanced occupant protection in frontal crashes, and $410,000 to conduct five side-impact pole tests (which includes the cost of two specialized dummies and five vehicles, and the cost of five tests). We also requested funds to purchase 16 dummies for use in our forthcoming advanced air bag compliance test program (eight dummies, of two sets, would be required at each of two laboratories).

Our first priority is to restore the $675,000 deleted from the compliance program in fiscal year 2000. If the program were only increased $1.0 million in fiscal year 2001, we would use the remaining $325,000 to purchase four dummies and not conduct any side impact pole tests. If the increase were $2.0 million, we would allocate the funds as follows:

Return full-scale vehicle tests to prior year level	$675,000
Purchase 13 dummies—advanced air bag testing	1,015,000
Purchase 3 side impact pole tests and 3 vehicles	150,000
Purchase 2 dummies—side impact pole tests	160,000
Total	2,000,000

The $2 million increase would provide for only 13 of 16 dummies which are required to conduct advanced air bag testing at two laboratories and would reduce the number of planned side impact pole tests from five to three.

ADVANCED AIR BAG PROTECTION

Question. Please explain your plans for a testing program for advanced air bag protection, explaining the minimum amount that would be needed to initiate work in fiscal year 2001.

Answer. Vehicle performance requirements for advanced air bag protection will be assessed using a number of test protocols, most of which are different from the tests that are currently being conducted. The differences involve how vehicles are tested, which test dummies are used in those tests, and how those dummies are calibrated and positioned in the vehicles. New test procedures (i.e., detailed instructions to independent testing facilities) will be prepared for positioning the test dummies in and performing tests on these vehicles. The test procedures for crash testing also specify requirements for the maintenance, preparation, and calibration of the test dummies used in those tests. The minimum amount needed to initiate this work in fiscal year 2001 would be $580,000 to purchase two sets of test dummies at a cost of $290,000 per set:

Two six-year-old dummies	$160,000
Two three-year-old dummies	160,000
Two fifth percentile female dummies	200,000
Two 12-month-old dummies	60,000
Total	580,000

Because of anticipated demand for these devices, it is imperative to have this funding available at the beginning of fiscal year 2001 so that orders can be placed. Also, past experience has shown that new test dummies, as manufactured, will require some corrections by the dummy manufacturer(s) prior to acceptance by NHTSA. Once the devices have been accepted, they will be used by the staff in the vehicle safety compliance office who will write the detailed test procedures. In addition, vehicle manufacturers will have the option to certify vehicles which have advanced air bag protection to the new requirements beginning in mid-model year 2000. Therefore, it is anticipated that some fiscal year 2001 tests for Federal Motor Vehicle Safety Standard No. 208 will use these new procedures. To be able to conduct these tests, it is imperative that the new test dummies be available quickly so that the test procedures can be completed.

While work can begin in fiscal year 2001 with two sets of dummies, this amount is insufficient to conduct an advanced air bag compliance test program. As proposed in the fiscal year 2001 budget, a minimum of two sets of dummies would be required at each of two test laboratories to conduct a compliance test program. The estimated cost for dummies would be $1,160,000 (4 × $290,000 per set of dummies). A fully operational program would require three sets of dummies at each of three test laboratories. The third set of dummies would enable the program to continue without extensive time delays when dummies are damaged during testing. The estimated cost for dummies for a fully operational program would be $2,610,000 (9 × $290,000).

SAFETY DEFECTS INVESTIGATION FUNDING

Question. Please break out how the funds requested for safety defects investigation would be used and compare the amounts expended (or planned to be expended) in fiscal year 2000.

Answer. [The information follows:]

Activity	Fiscal year 2000	Fiscal year 2001
Defect Identification and Evaluation	$1,613,000	$2,466,000
Testing and Surveys	850,000	1,060,000
Recall Monitoring and Performance	200,000	200,000
Total	2,663,000	3,726,000

The increases in the safety defect investigation request will enable the agency to:

—$210,000—Restore defect investigation testing to the Vehicle Research and Test Center;

—$145,000—Provide staff support to monitor and investigate small population vehicle groups as transit buses, recreational vehicles, fire and rescue vehicles, and motorcycles for which the consequences of a vehicle defect can be catastrophic;
—$100,000—Enhance internet capabilities for both the agency and public with additional hardware and software to expand Internet search options;
—$218,000—Purchase equipment and expertise to conduct computer-aided design analyses of vehicle components;
—$290,000—Provide contract staff support to conduct on-site investigations of crashes; and
—$100,000—Enhance defect investigation databases to maintain consistency with industry.

COOPERATIVE AGREEMENT WITH LAW ENFORCEMENT OFFICERS

Question. In what states and when has NHTSA entered into cooperative agreements to train law enforcement officers as odometer fraud investigators?

Answer. In fiscal year 1998, NHTSA entered into cooperative agreements with the Florida Highway Patrol, the Colorado State Patrol, and the Utah Motor Vehicle Enforcement Division. Each of these states provided a law enforcement officer to NHTSA for training. In fiscal year 1999, there were no cooperative agreements. In fiscal year 2000, the agency entered into a cooperative agreement with Connecticut State Police. An officer from this state is currently assigned to NHTSA for training. The agency is in the process of soliciting applications from several states for a second officer to be assigned in fiscal year 2000.

ODOMETER FRAUD

Question. The NHTSA budget submission requests funding to train odometer fraud investigators in two states. From what two states does NHTSA intend to train investigators?

Answer. States for fiscal year 2001 have not been selected. When funds are available, NHTSA will solicit applications from all state enforcement agencies involved in odometer fraud enforcement.

Question. What is the status and findings of the investigation to determine the effectiveness of the odometer fraud enforcement program?

Answer. The Congress earmarked funds in fiscal year 1994 and an initial Request for Proposal was announced in fiscal year 1995 but no bids were submitted. A second Request for Proposals was announced in fiscal year 1996 and a contract to perform this research was awarded in July 1996. The contractor has collected the data and completed the requirement of the contract. The agency is assessing and analyzing the data and plans to complete the study by the spring of 2001.

HIGHWAY SAFETY PROGRAM

Question. Please submit a copy of your fiscal year 1999 and fiscal year 2000 spending plans which indicates major activities and contracts approved.

Answer. Within the Highway Safety program areas, major activities (such as Impaired Driving, Occupant Protection, etc.) are further broken down in major areas of effort, e.g., Enforcement/Adjudication and Public Education/Prevention. Although smaller program areas would have similar areas of effort, the emphases and funding may vary from year-to-year.

Attached is a table summarizing the major activities and funding categories for fiscal year 1999 and fiscal year 2000.

HIGHWAY SAFETY PROGRAMS

	Fiscal year 1999	Fiscal year 2000
OCCUPANT PROTECTION:		
Program Development	$4,867,900	$4,602,000
Public Information and Education	2,880,000	2,698,800
Technology Sharing	1,250,000	1,370,000
Outreach	2,475,100	1,071,200
Total, Occupant Protection	11,473,000	9,742,000
IMPAIRED DRIVING:		
Public Information and Education	4,715,000	3,675,000

HIGHWAY SAFETY PROGRAMS—Continued

	Fiscal year 1999	Fiscal year 2000
Enforcement and Adjudication	3,190,000	2,900,000
Outreach	2,200,000	2,102,000
Legislation	543,000	615,000
Total, Impaired Driving [1]	10,648,000	9,292,000
RESEARCH AND EVALUATION:		
Alcohol and Drug Research	1,594,000	1,475,000
Aggressive Driving (Earmark)	0	1,000,000
Occupant Protection Research	1,018,000	969,000
Rural Trauma (Earmark)	0	875,000
Speed and Aggressive Driving	928,000	801,000
Evaluation and Technology Transfer	657,000	574,000
Pedestrian/Bicycle Research	380,000	522,000
Older Driver Research	555,000	493,000
EMS Research	305,000	305,000
Fatigue Research	0	138,000
Total, Research & Evaluation	5,437,000	7,152,000
RECORD/LICENSING AND DRIVER ED:		
Driver Licensing and Education	373,000	826,000
Traffic Records	755,000	724,000
State and Community Services	789,000	746,000
Total, Record/Licensing & Driver Ed	1,917,000	2,296,000
TRAFFIC LAW ENFORCEMENT:		
Enforcement Demonstrations	427,500	700,800
National Organizations	270,000	460,200
Training and Technical Assistance	444,500	400,000
Public Information and Education	321,000	375,000
Technology Transfer	250,000	100,000
Total Traffic Law Enforcement	1,713,000	2,036,000
EMERGENCY MEDICAL SERVICES:		
National Standard Curricula	1,600,000	755,000
EMS Leadership	260,000	238,000
EMS System Component Support	387,000	220,000
Injury Prevention and Control	235,000	128,000
EMS Information, Technologies, and Dissemination	110,000	84,000
Total, Emergency, Medical Services	2,592,000	1,425,000
DRUGS, DRIVING, AND YOUTH:		
Public Information and Education	267,000	310,000
Advanced Drugged Driving Training	733,000	280,000
Law Enforcement Initiatives and New Technologies	0	260,000
Coordination and Data Collection	0	218,000
Drugged Driving Research	250,000	50,000
International Conference on Drug Research	0	20,000
Juvenile Judge Prevention Program	0	0
National Summit Meeting	150,000	0
Total, Drugs, Driving and Youth	1,400,000	1,138,000

HIGHWAY SAFETY PROGRAMS—Continued

	Fiscal year 1999	Fiscal year 2000
NATIONAL DRIVER REGISTER: Timesharing Computer Services & Help Desk	1,110,000	1,110,000
PEDESTRIAN, BICYCLE AND PUPIL TRANSPORTATION:		
Technical Assistance, Training, and Infrastructure Support	507,000	400,000
Public Information and Education	340,000	373,000
Partnerships and Outreach	255,000	285,000
Total, Pedestrian, Bicycle and Public Transportation [2]	1,102,000	1,058,000
NEW/EMERGING/TEA-21 ISSUES: Aggressive driving, drowsy driving, older driving, training	0	1,000,000
NOPUS: Surveys	300,000	850,000
MOTORCYCLE SAFETY:		
Information and Education	200,000	200,000
Technical Assistance, Training, and Infrastructure Support	234,000	164,000
Partnerships and Outreach	75,000	50,000
Total, Motorcycle Safety	509,000	414,000
DRIVER LICENSE IDENTIFICATION: State driver licensing system grants	325,000	0
Total	38,526,000	37,513,000

[1] Fiscal year 1999 combined the Alcohol and DEC programs.
[2] Fiscal year 1999 included $357,000 from Patterns for Life.

Question. With respect to the fiscal year 2000 program, how did you improve the allocation or targeting of the Highway Safety funds since last year? How is this allocation consistent with the agency's performance goals?

Answer. This budget request aligns our major priority areas with funding needs. NHTSA's highway safety performance goals include reducing alcohol-related fatalities; increasing the use of seat belts, child safety seats, and motorcycle and bicycle helmets; reducing speeding and aggressive driving related fatalities; reducing pedestrian fatalities; reducing crashes associated with driver fatigue; enhancing the older driver's ability to drive safely; and reducing the over-representation of young drivers in crashes.

NHTSA's fiscal year 1999 and fiscal year 2000 budgets reflect small adjustments to augment and emphasize certain programs that are demanding the attention of the agency. For example, the small increase in the Traffic Law Enforcement program reflects the congressionally mandated pursuit driving training for law enforcement officers and the agency's Strategic Plan to reduce speeding-related fatalities which have been on the rise since the elimination of the national maximum speed limit. Funding increases in the Highway Safety Research program reflect congressional earmarks for an aggressive driving demonstration in Maryland and head trauma research in Alabama. Increases in the Records and Licensing budget will provide funds to examine different licensing policies of several states as they relate to older drivers as well as to enhance efforts to improve the quality, uniformity and utility of traffic records data. The new Emerging Traffic Safety Issues program provides educational programs and materials on problems involving older drivers, aggressive drivers, and drowsy drivers.

The small decreases in the Occupant Protection and Impaired Driving Programs were necessary to allow for means to address the above and do not reflect a lower priority for these programs which remain NHTSA's and DOT's highest priority programs. NHTSA's complete fiscal year 2001 budget request includes significant increases designed to meet Presidential and Secretarial goals to increase seat belt usage and reduce alcohol-related fatalities and child fatalities.

Question. Please explain how you would allocate the additional funds if the contract funding for highway safety programs was increased by $.5 million and by $1.0 million?

Answer. Any additional funding would be used to augment programs throughout the Highway Safety program areas with a significant amount of any funds going to the Impaired Driving and Occupant Protection priority programs which have critical program targets.

OLDER DRIVER PROGRAM

Question. Please explain the scope and nature of your older driver program, describing current demonstrations underway, research projects, public information and educational activities, and assistance to state licensing agents and physicians.

Answer. In 1989, NHTSA initiated a research program to address the behavioral aspects related to older drivers focusing on (a) identifying the functional capabilities required for driving, (b) identifying problem drivers, and (c) identifying those conditions that may be amenable to rehabilitation.

One ongoing demonstration addresses all three of these areas. It is the Maryland Model Driver Screening and Evaluation Program. The primary outcome of this project will be an evaluation of the value of the Gross Impairment Screening tool (GRIMPS) in identifying drivers whose skills or capabilities have declined to the point where it is not safe for them to drive. Analyses will determine which individual portions of the GRIMPS are most predictive of poor driving performance. Occupational therapists in this study will determine if those persons identified as having poor functional capabilities can be rehabilitated or retrained to make them safer drivers.

Other demonstrations include a Florida evaluation of an automated version of the GRIMPS in Memory Clinic settings, and a Texas project to document a successful pedestrian program operating in a health organization setting. This project will also adapt key components for use by Hispanic populations.

Other research addresses the needs of licensing agencies, physicians, and others who work with elderly people. Past research includes an evaluation of the relative risk posed by drivers with reported medical conditions. It will help the licensing authority in the State of Utah to reexamine and revise its reporting requirements. Another investigation will develop a matrix of health symptoms or conditions that are common among older people. It will provide recommendations regarding driving by persons with those symptoms, based on the identified severity of the symptom. Such recommendations could include referral to the licensing authority, counseling, or a variety of rehabilitation options.

Development of public information and education materials regarding older drivers is in its early stages. Currently, NHTSA is establishing partnerships with organizations that have an interest in older driver safety, including AARP and the USAA Educational Foundation. We will develop a brochure to help older drivers recognize health changes that might affect their driving, while directing them to changes in their driving patterns or to professionals who can help them maintain and improve their health and driving abilities.

Question. If funding for the older driver program were increased by $.5 million, (not including the flagship initiative), what activities would be funded?

Answer. With increased funding, our two primary objectives of implementing public awareness efforts and continuing critical research would be improved.

In terms of research, additional funds would enable NHTSA to investigate the types of traffic safety messages that resonate with older persons including those in diverse communities. These messages would then be used to develop and produce materials that are relevant to diverse target audiences. NHTSA would also form additional strategic partnerships with senior citizen organizations and with other diverse organizations to promote the new public awareness materials.

Additional funding would also enable NHTSA to redirect existing safety programs to provide more emphasis on the needs of older drivers and pedestrians. For example, increasing numbers of older people ride bicycles, but NHTSA does not have any programs that encourage older people to wear bicycle helmets. NHTSA could adapt bicycle helmet programs that were designed for younger audiences to meet the needs of this different population. NHTSA would examine all program areas and adapt the programs in those that would have the greatest potential safety impact.

.08 BAC LAWS

Question. Please describe the activities that have been conducted or are planned in response to the Committee's assertion that more guidance and research is needed

on the impacts of 0.08 BAC laws and on countermeasures targeted at drivers aged 21- to 34-year-old.

Answer. Since 1991, NHTSA has published five studies regarding the effectiveness of .08 BAC laws in reducing alcohol-related fatal crashes. These studies have provided consistent and persuasive evidence that these laws, particularly in combination with administrative license revocation (ALR) laws, are associated with reductions in alcohol-related crashes and fatalities.

A project that began in fiscal year 1999 is examining the impact of the Illinois .08 BAC law on alcohol-related crashes and the enforcement and court systems. The final report will be available in 2001.

A fiscal year 2000 study will evaluate the .08 BAC legislation in Texas. The final report is scheduled to be available in 2002.

Another fiscal year 2000 project will evaluate a program that is targeted at 21–34 year olds, the highest risk impaired driving population. In this study, scheduled to start in June 2000, NHTSA will identify and screen existing programs to select one amenable to evaluation. The study will describe the program, conduct a process evaluation, and determine whether the program was effective in changing DWI-related incidents and behavior(s).

Question. Please delineate the nature and amount of fiscal year 2000 contracts and fiscal year 2001 plans and associated funding amounts to continue your efforts to further the adoption and implementation of 0.08 BAC laws.

Answer. NHTSA provides public information and educational materials that support the adoption and implementation of 0.08 BAC laws and, when requested by state officials, offers testimony on 0.08 BAC issues.

In fiscal year 2000, $80 million is authorized for the Section 163 0.08 BAC Law Incentive Grant program, which was designed to encourage states to pass and enforce 0.08 BAC laws. To be eligible for these grants, states have until July 15, 2000, to enact complying laws. Currently, 17 states and the District of Columbia have 0.08 BAC laws in effect. For fiscal year 2001, $90 million is authorized for Section 163.

A fiscal year 2000 research and evaluation contract for $150 thousand is in place to measure the effectiveness of the Texas 0.08 law and its impact on law enforcement and the courts. Similar research is planned for fiscal year 2001 in the State of Washington.

Question. What studies has NHTSA initiated or supported to evaluate the effectiveness, costs, or benefits of 0.08 BAC laws? What is the status of the Illinois project? What studies on 0.08 BAC laws are planned with fiscal year 2001 funds? How much has been allocated for each study?

Answer. NHTSA has published five studies regarding the effectiveness of .08 BAC laws in reducing alcohol-related fatal crashes. They are:

—The Effects Following the Implementation of an 0.08 BAC Limit and Administrative Per Se Law in California (1991) ($125,000)

—The Impact of Lowering the Illegal BAC Limit to .08 in Five States in the U.S. (1995) (Conducted in-house—no contract funds)

—The Relationship of Alcohol Safety Laws to Drinking Drivers in Fatal Crashes (1999) ($20,000)

—The Effects of .08 BAC Laws (1999) ($65,000)

—Evaluation of the Effects of North Carolina's .08 BAC Law (1999) ($80,000)

Other than the California study, these studies were restricted in scope to examining the effectiveness of .08 BAC laws on alcohol-related crashes. The California study analyzed changes in alcohol-related crashes, and also examined the law's effect on enforcement and court systems. The .08 law was not found to create a burden for either the police or courts.

A fiscal year 1999 NHTSA study is examining the effectiveness of Illinois' .08 BAC law. That study, modeled after the California study, is also examining both alcohol-related fatalities and the impact on law enforcement and the courts. To-date, police officers, prosecutors, and judges have been interviewed in several Illinois jurisdictions regarding the impact of the law on their work and on their agencies. An interim report, documenting the results of these interviews, is due in May 2000. The final report, including fatal crash analysis, is due June 2001. ($150,000)

A fiscal year 2000 study of Texas' .08 BAC law will parallel the Illinois study, providing information on alcohol-related fatalities, and impact on law enforcement and the court system. The report will be available in 2002. ($150,000)

There are no studies planned with fiscal year 2001 funds. The only other jurisdictions to recently adopt .08 are Washington (which simultaneously adopted 12 other impaired driving laws) and Kentucky (which we will consider evaluating in fiscal year 2002 when more data is available).

OPEN CONTAINER LAWS

Question. Although the statutory deadline has not passed, how many states are likely to face a diversion of some of their federal aid highway funds for not adopting and enforcing an open container law as specified in TEA–21? How does the fiscal year 2001 budget address the issue of open container laws?

Answer. As of April 19, 2000, 32 states, the District of Columbia, and Puerto Rico do not have laws in place that meet the open container provisions of TEA–21 and, therefore, face a diversion of some of their federal aid highway funds in fiscal year 2001. The following 18 states have enacted laws that comply: Arizona, California, Illinois, Iowa Kansas, Maine, Michigan, Nebraska, Nevada, New Hampshire, North Dakota, Ohio, Oklahoma, Rhode Island, South Dakota, Utah, Washington, and Wisconsin.

Open container laws are not addressed in the fiscal year 2001 budget, however, a research and evaluation project on the effectiveness of open container laws is currently in progress and should be completed in fiscal year 2001.

REPEAT OFFENDER PROVISIONS

Question. Although the statutory deadline has not passed, how many states are likely to face a diversion of some of their federal aid highway funds because they are not in compliance with the repeat offender provisions of TEA–21?

Answer. As of April 19, 2000, 40 states, the District of Columbia, and Puerto Rico do not have laws in place that meet the requirements of the repeat intoxicated driver provisions of TEA–21 and face a diversion of some of their federal aid highway funds in fiscal year 2001. The following ten states have enacted laws that comply: Arkansas; Arizona; Colorado; Indiana; Maine; Michigan; Nevada; Nebraska; New Hampshire; and Washington.

IMPAIRED DRIVING

Question. The states have adopted various statutes with the goal of curing impaired driving. Has NHTSA conducted any studies to determine which laws or combination of laws are the most effective? If so, what does the research tell us about the contribution of congressionally mandated laws, such as open container or repeat offender, in reducing impaired driving?

Answer. Over the last 30 years, NHTSA and others have conducted research on impaired driving laws to determine if they reduce the number of alcohol-related fatalities. Studies include laws focused on minimum drinking age, mandatory jail sentences, per se BAC limits (including .08 BAC limits for adults and .02 BAC limits for drivers under age 21), administrative license revocation, graduated drivers' licensing programs, and vehicle sanctions.

In general, research suggest that (1) most of these laws have had some impact in reducing alcohol-related crashes or fatalities; (2) these laws are more effective when accompanied by publicity and enforcement; and (3) combinations of laws (and other activities) are more likely to reduce the number of alcohol-related crashes than are individual laws (or activities).

Federally mandated laws can be effective. As a result of federal legislation requiring age 21 Drinking Laws, all states enacted such laws and research provides very consistent and convincing evidence that they have reduced the number of alcohol-related crashes, deaths, and injuries.

Prior to fiscal year 1999, NHTSA had not conducted any research on the effectiveness of open container laws. A study initiated in fiscal year 1999 is now examining the effectiveness of these laws in several states.

No research has been conducted on the effectiveness of the repeat offender transfer provision. However, NHTSA has conducted several studies on the effectiveness of specific countermeasures included in that provision that are targeted at repeat offenders, including the use of vehicle sanctions, such as ignition interlocks, and vehicle impoundment or immobilization. A project to determine the effectiveness of the repeat offender provision is planned for 2001.

DRUG EVALUATION AND CLASSIFICATION (DEC) PROGRAM

Question. Please explain how the funds requested for the Drug Evaluation and Classification (DEC) program would be used and compare the fiscal year 2001 request to fiscal year 2000 expenditures.

Answer. NHTSA estimates that drugs are used by approximately 10 to 22 percent of drivers involved in crashes. Often these drugs are used in combination with alcohol.

There is no longer a separate budget for the DEC Program. The DEC program has been incorporated into the overall impaired driving program and the Drugs, Driving, and Youth initiative. The following chart is reflective of the drug-impaired driving budgeted items.

Projects	Fiscal year 2000	Fiscal year 2001
Request Advanced Drugged Driving Training	$280,000	$250,000
Drugged Driving Research	50,000	50,000
International Conference on Drug Research	20,000	0
Law Enforcement Initiatives and New Technologies	260,000	350,000
Public Information and Education	310,000	300,000
Coordination and Data Collection	218,000	200,000
Juvenile Judge Prevention Program	0	250,000
Total	1,138,000	1,400,000

While great strides have been made in the area of reducing impaired driving over the past 15 years, America's impaired driving crash rate has stagnated for the past three years. Countermeasures are needed to reduce the number of alcohol-impaired and other drug-impaired drivers on the nation's highways. The funding will increase and promote training in drugged driving detection, drug detection and training for prosecutors; involvement of prosecutors in community drug prevention programs; uniform sanctions for drug offenders; DEC related research; collection and analysis of state arrest data on drug impaired drivers; development of courtroom skills for testifying in alcohol and drug impaired driving cases; and expansion of DEC to community policing programs.

Public information and education materials are needed to educate the public, health care providers, and the courts on the risks of drugged driving. New programs will be initiated to involve juvenile judges in prevention activities at the community level and to develop educational materials for diverse communities.

IMPAIRED DRIVING

Question. Please provide an update on any studies that NHTSA has underway or planned that will help the criminal justice system deal with drug-impaired drivers. How much will be spent on those efforts during fiscal year 2000 and fiscal year 2001?

Answer. NHTSA currently has two important literature reviews underway that examine drug-impaired driving. One review focuses on antihistamine use and driving-related skills; the other is a state-of-knowledge literature review covering the entire drug-impaired driving area. This review will include all available scientific studies, including specific studies of drug-impaired driving as it relates to the criminal justice system (e.g., studies on the arrest and adjudication process and sanctioning). Total funding for these two projects is approximately $200,000.

A new fiscal year 1999 study will determine the feasibility of developing a drugged-driver detection system, similar to the Standardized Field Sobriety Test, based on observable signs and symptoms of drug use. This study, funded at $175,000 will identify potential performance measures that can be used to assess drug impairment in any setting, as well as measures that could be used in roadside situations. This project will include a field demonstration of the selected performance measures.

Future funds will be used for a combination of epidemiological research (e.g., determining the incidence of drug-related driving or crash involvement), laboratory studies (e.g., measuring the performance-related effects of various drugs), and countermeasure development (e.g., developing tools for law enforcement).

Question. What is NHTSA doing to work with the states to improve laws pertaining to drug-impaired driving? How much is in your fiscal year 2000 spending plan and fiscal year 2001 budget request for that activity?

Answer. NHTSA works with the states to provide public information and educational materials on effective laws through publications such as the Digest of State Alcohol-Highway Safety Related Legislation that contrasts each state's impaired driving (alcohol and other drug) laws and provides a resource for comparing and developing improved impaired driving laws.

Considerable legal research and assistance are given to the states directly through a contract with the National Prosecutor Research Institute's National Traffic Law Center. The Center provides direct technical expertise on existing alcohol and drug

impaired driving laws, provides opinions on proposed laws, and develops training for prosecutors and judges.

The Drugs, Driving and Youth initiative of $1.1 million in fiscal year 2000 and $1.4 million in fiscal year 2001 provides funding for activities that support improvements to laws and countermeasures to reduce drug and alcohol impaired driving.

Question. Please break out in detail by project or activity how NHTSA proposes to use the $11,181,000 requested for impaired driving and compare that to the allocation expected for fiscal year 2000.

Answer. Alcohol-related fatalities account for 38 percent of all motor vehicle fatalities. While this represents a slight decline from 1998 levels, more investment is needed for reaching the high risk groups.

[Dollars in thousands]

Area	Fiscal year 2000	Fiscal year 2001 request
Impaired Driving Program	$9,292	$11,181
Public Information and Education	3,675	3,975
Outreach	2,102	2,495
Legislation	615	815
Enforcement and Adjudication	2,900	3,896

Slight increases are requested in the areas of public information and education, outreach, and legislation to meet the needs of states and communities. A more significant increase is requested in enforcement and adjudication to continue to focus on states with high alcohol-related fatalities using highly publicized enforcement initiatives. In addition, maintaining up-to-date training and technology applications for law enforcement, prosecutors, and judges in the detection and sentencing of DUI offenders will remain a priority activity.

In fiscal year 2001, NHTSA will be exploring new strategies for reaching the youth population, including underage college students. Action grants will be awarded to engage strategic organizations to support highly visible enforcement. In addition, outreach grants are planned with national organizations and employers to support prevention activities. The national public education campaign entitled You Drink & Drive. You Lose. will be expanded to focus on a summer message due to the high number of alcohol-related fatalities during that period. This campaign will target the high risk 21–34 year old age group.

MOTORCYCLE SAFETY

Question. The NHTSA budget requests to triple funding for motorcycle safety. Why is such a large increase necessary?

Answer. Unlike other traffic safety performance indicators that reveal that fatalities are declining, motorcyclist fatalities are actually on an upward trend. In 1998, 2,284 motorcyclists were killed and an additional 49,000 were injured in traffic crashes in the U.S.—8 percent more than the 2,116 motorcyclist fatalities, but 7 percent less than the 53,000 motorcyclists injured in 1997. For 1999, preliminary estimates indicate that this upward trend is continuing—while an estimated 48,000 motorcyclists were injured, an estimated 2,537 motorcyclists were killed in 1999, 11 percent more than in 1998. Moreover, motorcyclists killed in traffic crashes continue to have higher rates of intoxication than driversof other vehicles.

In 1998, NHTSA facilitated development of the National Agenda for Motorcycle Safety, a comprehensive plan that incorporates the diverse viewpoints of the motorcycling community. The draft National Agenda for Motorcycle Safety, released for comment in November, 1999, identified 51 recommendations to improve motorcycle safety.

Prior public investments in motorcycle safety issues have been minimal. Recommendations in the draft Agenda include studies on the efficacy of motorcycle training programs and the role of alcohol in motorcycling.

In addition to continuing current program initiatives, the requested budget increase will support efforts to:

—investigate the causes of motorcycle crashes;

—collect data to determine the impact and relationship of licensing programs, training curricula content, behavior and attitudes, and vehicle characteristics (e.g., braking systems) on crash occurrence and involvement;

—undertake research to understand the role of alcohol in motorcycling;

—characterize the extent and impact of the injuries sustained in motorcycle crashes by supporting efforts to enhance the Crash Outcome Data Evaluation Systems (CODES) program for linking medical and crash data; and
—gather data on the costs of rehabilitation and disability resulting from involvement in motorcycle crashes.

DRUGS, DRIVING AND YOUTH

Question. Please explain the expected costs of each of the new and on-going initiatives specified under the Drugs, Driving & Youth initiative.

Answer. The following table summarizes the planned expenditures, in fiscal year 2001, for drugs, driving, and youth.

Projects	*Fiscal year 2001 request*
Law Enforcement Initiatives & New Technologies	$350,000
Public Information and Education	300,000
Advanced Drugged Driving Training	250,000
Juvenile Judge Prevention Program	250,000
Coordination and Data Collection	200,000
Drugged Driving Research	50,000

In 1998, 6,168 youth, ages 15 through 20, died in motor vehicle crashes, a 1.2 percent decrease from 1997. Of this number, 2,210 fatalities were alcohol-related; this was a 4 percent decrease from 1997. Since 1982, youth fatality trends have compared favorably to those of the adult (over age 21) population, with a 28 percent overall decline for youth compared to a 2 percent increase for adults. However, in terms of fatality rates per 100,000 population, youth are still over-represented by a factor of 3 to 2 (9 to 7 for alcohol-related fatalities).

Countermeasures are needed to reduce the number of alcohol and other drug-impaired drivers on the nation's highways. Additional training for law enforcement officers, prosecutors and judges are needed in the identification, prosecution, and adjudication of the drug-impaired driver. A focus on technology support for the trained drug recognition expert will also be supported. Funding will be provided to collect additionaldata to more clearly define and understand the extent of the drug impaired driving problem.

Public information and education materials will be developed to educate the public, health care providers, and the courts on the risks of drugged driving (particularly among youth) and potential prevention strategies. A new program will be initiated to involve juvenile judges in prevention activities at the community level, as well as the development of educational materials for diverse communities.

GRADUATED DRIVER LICENSING (GDL) SYSTEMS

Question. How many states are now receiving grant funds to test and evaluate graduated licensing systems? Please indicate funding amounts and results of the various evaluations now being conducted.

Answer. Novice drivers are over-involved in crashes. Graduated driver licensing systems are one means to reducing these crashes. Three states, Kentucky, Michigan, and North Carolina, have received funds to assist them in evaluations of their new graduated driver licensing systems. Kentucky has received a total of $230,000 (fiscal year 1998, fiscal year 1999, and fiscal year 2000). Michigan has received a total of $370,000 (fiscal year 1998, fiscal year 1999, and fiscal year 2000), and North Carolina has received a total of $397,271 (fiscal year 1994).

Preliminary evaluation results from all three states will be available in calendar 2000. However, until the evaluations are completed (i.e., in CY 2001 for Kentucky and North Carolina, and CY 2003 for Michigan), it will not be possible to determine the impact of these laws. It is expected, however, that all three evaluations will further corroborate other graduated driver licensing systems evaluations which have shown crash reductions of 5 to 30 percent for novice drivers.

PRE-LICENSING DRUG TEST FUNDING

Question. Will any funds be spent on random or pre-licensing drug tests for youth in fiscal year 2000 or fiscal year 2001?

Answer. No funding will been expended on pre-licensing drug testing in fiscal year 2000 nor is any budgeted for in fiscal year 2001.

SEAT BELT USAGE

Question. According to the Department's 1999 Performance Report, NHTSA missed its seat belt usage goal for 1999. NHTSA's goals for 2000 and 2001 in this

are even greater than the missed goal. When a performance objective like this is missed, does it make sense to review outyear goals and reassign current objective to the future?

Answer. The seat belt use goal, while ambitious, has tremendous potential in terms of significantly increasing safety and reducing the toll associated with traffic crash fatalities and injuries. Reaching 85 percent seat belt use would prevent an estimated 4,200 deaths and 102,000 injuries and reduce substantially the societal costs associated with highway traffic crashes. The Department, with its many partners, has committed to mounting an all-out effort to meet the national goal of 85 percent by the end of 2000.

The agency has outlined a two pronged approach to achieve a significant increase in seat belt use over the next year. This two pronged approach requires NHTSA to: (1) expand the scope of the Buckle Up America Campaign in all 50 states; and (2) focus on several opportunities including: states with high seat belt use rates, states with new primary laws, states with potential to increase belt use, and states likely to pass primary seat belt laws.

A key element of the campaign is working with states and law enforcement agencies to increase enforcement activities throughout 2000 and 2001. NHTSA will continue to build upon the cadre of 7,000 law enforcement agencies participating in the national seat belt enforcement mobilizations targeted to the Memorial Day and Thanksgiving Holiday weeks of each year.

To support this enforcement effort, the agency will provide technical assistance to the states as they implement their fiscal year 2000 Section 157 innovative grants ($25 million) provided to increase seat belt use. These funds were awarded under the TEA–21, Section 157 discretionary grant program, and will institutionalize periodic waves of seat belt and child passenger protection enforcement. Additional funds of over $54 million were awarded through the Section 157 incentive grant portion to states whose seat belt use rate exceeded the national average or reported an increase in seat belt use from the previous year.

A significant portion of these grants along with Section 403 Demonstration and 402 grant funds will support increased enforcement for states by funding additional enforcement waves, equipment, and statewide media campaigns.

MINI-NOPUS SURVEYS

Question. What were the results of mini-NOPUS surveys that were conducted most recently in conjunction with the Buckle Up America campaign?

Answer. The results of the mini-National Occupant Protection Use Surveys (NOPUS) conducted most recently in conjunction with the Buckle Up America campaign are as follows:

MINI-NOPUS PERCENT SHOULDER BELT USE

	May 98	June 98	Dec 98	Dec 99
Overall	62	65	70	67
Drivers	63	66	70	67
Passengers	60	63	69	64
Passenger Cars	66	69	72	70
Drivers	67	70	73	71
Passengers	62	66	72	66
Other Pass Vehicles	56	60	66	62
Drivers	57	61	67	62
Passengers	55	58	65	60

The mini-NOPUS conducted in May 1998 obtained observational shoulder belt use prior to the 1998 Memorial Day Buckle Up America blitz. The shoulder belt use rate obtained from this mini-NOPUS provided a baseline by which to monitor restraint use. The mini-NOPUS conducted in June 1998 obtained the data within five to seven days after the 1998 Memorial Day blitz. The December 1998 mini-NOPUS was conducted within five days after the 1998 Thanksgiving Day blitz. The December 1999 mini-NOPUS was conducted within five days after the 1999 Thanksgiving Day blitz.

SEAT BELT USAGE RATE

Question. How many states had a lower seat belt usage rate in 1999 than 1998?

Answer. Eleven states reported lower seat belt usage rates for 1999 as compared to 1998. These included seven whose reported usage rates were more than one full percentage point below the rates reported for 1998: The District of Columbia (down 3.9 percent); Indiana (down 4.5 percent); Maine (down 2.3 percent); Mississippi (down 3.5 percent); New Hampshire (down 2.5 percent); Virginia (down 3.7 percent); and, West Virginia (down 5.8 percent). The other four states reported decreases of less than one full percentage point from 1998 to 1999: Colorado (down 0.8 percent); Hawaii (down 0.2 percent); Texas (down 0.4 percent); and Puerto Rico (down 0.5 percent). South Dakota and Wyoming reported no seat belt surveys for 1999.

SECTION 157 INNOVATIVE GRANT PROGRAM

Question. How many employees work on the innovative grant portion of the Section 157 innovative grant program?

Answer. Because of the competitive nature of the Section 157 innovative program and the grant requirements themselves, a NHTSA committee of interdisciplinary experts was formed to review the grant proposals. Seven members serve on this committee. In addition to the seven headquarters staff who serve on the grant evaluation committee, two staff members in the Office of State and Community Services provide coordination services to the regional office staff who have oversight responsibilities for the Section 157 innovative grants.

In the Office of Contracts and Procurement, a contract specialist is responsible for communicating and coordinating all correspondence and information between the 52 potential applicants and the evaluation committee. In addition, this staff person prepares all award documents, contract modifications and other grant obligations.

In the NHTSA Regional offices, 41 staff members serve as Contracting Officer's Technical Representatives (COTRs) to carry out management and oversight responsibilities for the 46 innovative grants that were awarded.

Question. Please describe in detail each of the reasons why funds for the innovative grant portion of the Section 157 program were not distributed by October 1, 1999.

Answer. Current legislation requires states to submit applications in the prior fiscal year with the intention that Section 157 innovative grants will be awarded on the first of the new fiscal year, October 1. However, grant funds cannot be awarded until annual appropriations laws are signed and funds are made available to the agency. In addition, funding for Section 157 innovative grants could not be determined until after the award of Section 157 incentive grants. The Section 157 incentive grants were not awarded until November 2, 1999. Therefore, final negotiations were delayed in 1999 until the exact amount of funding available for fiscal year 2000 Section 157 innovative grants was known.

Following the award of the Section 157 incentive grants, when exact funding amounts could be determined, additional time was needed to allow the transfer of funds from FHWA to NHTSA. Current legislation requires funding to be allocated to FHWA and then distributed to NHTSA.

Even if the budget process would have allowed an October 1, 1999 award, the time to review the proposals would have made this date difficult to meet. The competitive process for awarding these innovative grants involved the review of 49 proposals and technical negotiation with each applicant. The negotiation process involved two or more rounds of technical questions about the proposal and suggestions for improvement to raise the chances of award for each particular state. Each state was given the required minimum of 10 days to respond to technical questions. The six month time period time was necessary to study and evaluate the proposals and negotiate the contents of each proposal, within the guidelines of a competitive grant process, prior to awarding 46 innovative grants.

Question. What steps are underway to ensure a more timely delivery of those funds during the next grant cycle?

Answer. NHTSA is taking several steps to ensure that the Section 157 review-approval-award process proceeds more expeditiously in future years.

First, NHTSA is seeking a legislative change in the timeline for allocation of Section 157 innovative funds (moving application and award dates forward), to create more separation between the incentive and innovative portions of the program. In this way the agency expects to provide the state applicants better information about available balances for innovative grants, after incentive funds are allocated, and to ensure that full funding is available and transferred from the Federal Highway Administration (FHWA) to NHTSA at the time award decisions are scheduled to be made.

Second, NHTSA has conducted an assessment with the State Highway Safety Offices to determine ways to improve the application, review and approval process of the fiscal year 2000 Section 157 innovative grant program.

Third, the Federal Register Notice for fiscal year 2001 will contain more details about the specific components that need to be included in each proposal and the criteria that will be used to evaluate each proposal. Providing the states with more information in the Federal Register Notice should improve the overall grant award process.

The combined effect of these steps should result in a streamlined, more efficient grant award process.

Question. What process did you use to award the innovative Section 157 grants?

Answer. The Section 157 innovative grants are intended to provide funding to develop and implement new programs that increase seat belt use.

To award the Section 157 innovative grants, an evaluation committee comprised of seven staff people was established to review the applications, prepare technical questions, evaluate the responses, and make recommendations for awards.

The process for this grant program, similar to other discretionary competitive grant programs, required that the committee members evaluate the individual proposals, assign scores to each proposal based on criteria described in the Federal Register Notice, assess applicant responses to technical questions, and reach consensus on which proposals to recommend for award.

Given the unique situation of evaluating proposals for future fiscal year dollars, it was necessary for the committee to further negotiate with several of the state applicants to ensure that the level of effort proposed by the states matched the amount of grant funding available.

Once decisions were made to award the selected states, funds were transferred from the Federal Highway Administration (FHWA) to NHTSA. Current legislation requires funding to be allocated to FHWA and then distributed to NHTSA.

Once the award and budget decisions were finalized, NHTSA prepared grant award documents for signature.

SECTION 157 INNOVATIVE GRANT AND SECTION 403 FUNDING

Question. Please prepare estimates of the amount of funds that will be available for the innovative grant portion of the Section 157 program for fiscal year 2001 and each of the remaining years of the TEA–21 authorization period. How will these funds be integrated with the ongoing NHTSA Section 403 program?

Answer. It is estimated that the Section 157 innovative grant portion of the program will remain constant at 20 to 25 million dollars annually. Currently the only estimates of funding available under Section 157 are the amounts provided in the Transportation Equity Act for the 21st Century (TEA–21) legislation for both the incentive and innovative portions. Under Section 157, the TEA–21 legislation provides for federal funding in the amounts of: $92 million for 2000, $102 million for 2001,$112 million for 2002 and $112 million for 2003. These figures illustrate a steady upward trend in funding that levels off in 2002 and 2003.

As specified in the legislation, before determining the innovative portion of the grant, the incentive portion for each state must be calculated. Incentive grant amounts for each state are calculated based upon savings in medical costs to the federal government that result from increased seat belt use rates. As additional states qualify for the incentive portion, the total amount allocated for that portion will increase. However, given that the overall budget for the Section 157 program is also scheduled to increase, it is estimated that the innovative grant amounts will remain relatively constant.

Section 403 funds are used primarily to develop, demonstrate, evaluate and research new countermeasures or strategies and conduct national public information and education campaigns. Section 157 innovative grant funds are used for developing and implementing innovative strategies at the state level to increase seat belt use. These strategies are based on each state's individual set of circumstances. Section 157 innovative grant fund programs will utilize information and countermeasures developed with Section 403 funds. The combination of programs to increase seat belt use funded by Section 157 and Section 403 funds should provide the best opportunity for raising seat belt use in individual states and, subsequently, raise our nationwide performance.

PRIMARY ENFORCEMENT LAWS

Question. How many additional states enacted primary enforcement laws last year? What was NHTSA's role in those legislative initiatives?

Answer. In 1999, Alabama and Michigan enacted primary enforcement laws. NHTSA provided technical assistance to both states on the effectiveness of a primary enforcement seat belt law in reducing deaths and serious injuries in motor vehicle related crashes.

AIR BAG SAFETY

Question. Please provide an update on the results of NHTSA'S efforts to reduce the adverse effects of airbag deployment, specifically as related to serious injuries and fatalities.

Answer. To reduce the affects of airbag deployment, NHTSA has completed the following activities:

—On March 19, 1997, NHTSA allowed vehicle manufacturers to quickly change the design of air bags to make them less powerful. This action resulted in air bags in most 1998 vehicles being redesigned and reduced in power.

—On November 21, 1997, NHTSA changed the vehicle safety rules to permit dealerships and repair shops to legally install air bag on-off switches for consumers meeting certain criteria.

—The agency took broad steps of exploratory research to improve future air bags. Collectively, these future improvements will be called advanced air bags and result from this major program of research to test and evaluate air bag systems.

—On September 17, 1998, and November 5, 1999, NHTSA published proposals to amend the federal motor vehicle safety standards to require advanced air bags in the near future. On May 12, 2000, the Final Rule for advanced air bags was published in the Federal Register (65 FR 30680) amending Federal Motor Vehicle Safety Standard No. 208, Occupant Crash Protection, to specify the details of the required phase-in of advanced air bags.

This agency continues its program to increase belt usage. NHTSA's educational activities to reduce the adverse effects of air bag deployment are conducted through the Buckle Up America campaign to increase education to consumers on the correct use of both safety belts and child safety seats and to get children to ride in the back. For example, since the Buckle Up America campaign began in 1996, motor vehicle deaths of children (0–4 years) have been reduced 12 percent. This reduction was the direct result of NHTSA's efforts to implement the strategies of high visibility enforcement of child passenger safety laws combined with public education. NHTSA plans to continue these same strategies.

Question. How much of the fiscal year 2001 budget request would be allocated to that area? Please break out those funds in detail.

Answer. In fiscal year 2001, $23.2 million is programmed for addressing air bag safety. This includes $11.9 million in funding requested for air bag research to reduce the adverse effects of air bag deployment, specifically as related to serious injuries and fatalities, and $11.3 million for Highway Safety programs.

The following provides a brief description for each of the major research areas:

Biomechanics Program—($5.0 million).—Research will continue to address the near-term development of pediatric and small female injury criteria associated with the intense and complex out-of-position air bag-vehicle occupant interaction. These efforts have as their goal the development of essential tools for the assessment of current and emerging air bag deployment systems.

Safety Systems Program—($4.4 million).—Research will continue on the development, performance, and monitoring of advanced air bag systems that build upon the technological solutions to air bag problems identified in the field experience, including those injuries resulting from aggressive air bag deployments (especially to children and occupants of short stature). Production vehicles with advanced safety systems will be evaluated and performance requirements established based on these systems. Such systems will include production multi-stage air bag inflators, air bag suppression technologies through occupant detection, seat position sensors, adjustable pedals, etc. Research will also continue on the development of improved air bag deployment timing through the use of anticipatory crash sensing technology. High speed (56 kmph) crash protection will continue to be evaluated for belted small female occupants in high severity crashes (and mid sized male occupant protection will be analyzed through NCAP performance testing). Also, research will include out-of-position occupant tests (static and/or dynamic) to evaluate the performance of side air bags and other related systems, i.e., Inflatable Tubular Structure (ITS), deployable upper interior paddings, etc.

Special Crash Investigations—(SCI) (about $2.5 million).—During fiscal year 2001, over 400 advanced air bag and side air bag cases would be investigated. Research will continue to investigate, through its SCI program, approximately 200

motor vehicle crashes that qualify for NHTSA's Air Bag Investigations Program and non-air bag related vehicle safety problems.

Highway Safety ($11.3 million).—The most effective action anyone can take to prevent air bag injury is to be properly restrained when riding in a vehicle with an air bag. Therefore, NHTSA does not distinguish between education to reduce the adverse effects of air bags and education to increase the correct use of safety belts and child safety seats. The entire fiscal year 2001 Highway Safety Occupant Protection budget request of $11.3 million should be considered as allocated to reducing the adverse effects of air bags.

SEAT BELTS

Question. How much is being spent in fiscal year 2000 and proposed for fiscal year 2001 within the core NHTSA program (not counting flagship initiatives) to determine why people do not wear their seat belts?

Answer. A total of $500,000 is being spent in fiscal year 2000, and $425,000 is proposed to be spent in fiscal year 2001, on projects that will collect data to determine why people do not wear their seat belts.

NHTSA will conduct a national telephone survey on occupant protection in the Fall (fiscal year 2000) that will include questions regarding the reasons for seat belt use and non-use. This survey will also collect data on attitudes and knowledge related to seat belts in order to assess how (self-reported) seat belt use differs according to various attitudes and knowledge levels. This project is funded at $250,000 in fiscal year 2000 and $150,000 is proposed for fiscal year 2001.

NHTSA will also conduct telephone surveys both before and after upcoming Buckle Up America (BUA) Enforcement Mobilizations. These surveys will collect data to assess how enforcement-related and other information affects decisions to wear seat belts. This project is funded at $50,000 in fiscal year 2000 and $125,000 is proposed for fiscal year 2001.

A third effort will explore reasons for non-use of seat belts among African Americans. This research is part of a larger program to identify the overall highway safety needs of African American communities and to develop more effective approaches for promoting highway safety in these communities. This project will be funded at $200,000 in fiscal year 2000 and $150,000 is proposed in fiscal year 2001.

Not included in the activities identified above is countermeasure development, based on past research to identify reasons for non-use of seat belts. Our past research has indicated that "part time" users of seat belts greatly outnumber persons who never use their seat belts. As a result, NHTSA is in the process of developing and testing interventions specifically designed for "part time" users. Project funding is $261,000 in fiscal year 2000 and $200,000 in fiscal year 2001. These numbers are not included in totals provided above since these activities are not for the purpose of identifying reasons for non-use of seat belts. Rather, this project goes to the next step and is developing countermeasures based on such reasons.

Question. How much is being spent in fiscal year 2000 and proposed for fiscal year 2001 within the core NHTSA program (not counting flagship initiatives) to develop and implement strategies to encourage those high risk groups to use their seat belts?

Answer. Of the core NHTSA program, approximately $1,905,000 is being spent to increase high risk group seat belt use in fiscal year 2000 and $1,794,000 in fiscal year 2001 through a combination of outreach programs, information and materials development and distribution, and research projects.

Of this amount, $1,044,000 is being distributed to organizations that represent or serve people living in rural areas as well as youth, truck drivers, the African American, Hispanic, and Native American communities. Approximately 30 organizations are being funded in fiscal year 2000, most of which are conducting outreach activities targeting high risk populations. For example, a number of projects initiated in fiscal year 1999 under the Buckle Up America Cooperative Agreement will be continued and expanded in fiscal year 2000 and 2001. Of the 21 organizations funded, eight represent African American organizations, five Hispanic organizations, and three youth, and two rural, with some crossover among them. Other youth targeted projects include Black Entertainment Television (BET), National Science Teachers Association, National Organizations for Youth Safety (NOYS), the Boys and Girls Clubs of America and the National Latino Children's Institute as well as support for the Healthy Child Care America Campaign and Buckle Up Kids Curriculum. We are continuing and expanding our outreach to the Native American community through our interagency agreement with the Indian Health Service. We are also funding several medical and health organizations to conduct educational outreach programs such as the Association of City and County Health Officials, American

Hospital Association, the National Medical Association and the National Hispanic Medical Association, Emergency Nurses Association and Emergency Nurses CARE, Inc., and the Meharry Medical College.

Approximately $300,000 is being spent on seat belt public information and education materials to support Buckle Up America and increase belt use among high-risk groups. This includes materials printed in languages other than English and materials that target other high-risk groups such as youth, truck drivers, the African American community, and Americans who reside in rural communities. NHTSA expects to devote roughly the same level of resources to these organizations and for printing costs of public information and education materials in fiscal year 2001.

In addition, a NHTSA project will explore reasons for non-use of seat belts as part of a study focusing on African Americans. The project goals will be to identify highway safety needs of African American communities and ways of promoting highway safety to those communities. Project funding is $200,000 in fiscal year 2000 and $150,000 proposed in fiscal year 2001.

Finally, advanced project work based on past NHTSA research on reasons for non-use of seat belts is being funded. That research has shown that "part time" users of seat belts greatly outnumber non-users. NHTSA currently is developing and testing interventions for part time seat belt users. Project funding is $261,000 in fiscal year 2000 and $200,000 in fiscal year 2001. An additional $100,000 will focus exclusively on research into pick-up truck driver non-seat belt use and children being allowed to ride in the cargo area of pick-up trucks in fiscal year 2000 and fiscal year 2001.

STATE SURVEY DATA

Question. Can NHTSA determine from state survey data of seat belt use counties or regions within a state that are below the national average? If so, please provide a table which depicts, on a state by state basis, the counties or regions of each state with low seat belt usage rates.

Answer. NHTSA cannot determine from state survey data of seat belt use counties or regions within a state that are below the national average. Under the NHTSA guidelines for seat belt observational surveys, states use random probabilistic methods to select places where seat belt observations will occur. Generally, this involves randomly choosing a subset of sampling units and specific locations within the selected sampling units where observations take place. States are not required to sample usage in all counties or regions of the state. The large majority of counties throughout the country are not surveyed. Thus, it is not possible to list counties or regions where seat belt usage is below the national average.

TRAFFIC LAW ENFORCEMENT PROGRAM

Question. What are the major challenges facing the law enforcement community and how does your budget request address those challenges?

Answer. The major challenge facing the law enforcement community is the need to continue conducting high visibility traffic law enforcement initiatives with dwindling resources and increasing demands for service. The traffic law enforcement budget request specifically addresses initiatives directed at increasing safety belt and child safety seat use and the reduction of impaired driving, speeding, and aggressive driving.

Increasing safety belt and child safety seat usage and combating impaired driving, speeding, and aggressive driving behaviors will require innovative countermeasures and best practices that can be tailored for use by law enforcement agencies throughout the country. Also, agencies are looking for automated enforcement technologies to supplement limited personnel resources. NHTSA is involved in researching existing and new technologies to identify where and how automated devices can supplement enforcement efforts for red-light running, speeding and railroad grade crossing violations. Ensuring the accuracy and reliability of these automated devices is crucial to their acceptance in any legal proceeding.

Law enforcement is committed to strongly supporting the NHTSA goals of reducing alcohol-related motor vehicle fatalities to no more than 11,000 by the year 2005 and increasing seat belt use to 90 percent by 2005. To meet these ambitious goals and to also reduce the carnage resulting from speeding and aggressive drivers, law enforcement agencies must continue to conduct high visibility enforcement programs. These programs, coupled with public information and education campaigns, increase the public's perception that traffic law enforcement efforts are widespread and critical to reducing motor vehicle injuries and fatalities.

In direct support of both the TEA–21 initiatives and the NHTSA strategic plan, the law enforcement community is working towards reducing speed related fatali-

ties. These fatalities have been on the rise since the elimination of the national maximum speed limit. Through a joint NHTSA and FHWA field demonstration project, emphasis will be directed to restoring credibility to speed limits through enforcement, engineering and education. NHTSA will continue to respond to high risk, aggressive driving by promoting innovative enforcement practices and new technologies and bringing more public attention to the issue.

AGGRESSIVE DRIVING

Question. What was the purpose and amount of each contract NHTSA let to reduce aggressive driving in fiscal year 1999 and fiscal year 2000?

Answer. A fiscal year 1999 NHTSA demonstration and evaluation project will soon be implemented in two sites. Two metropolitan law enforcement agencies, or combinations of agencies, have been selected to implement innovative enforcement techniques or strategies. Each program will include a public information and education (PI&E) component. The enforcement effort will be implemented in each site for a minimum of six months, and the effectiveness of each program will be evaluated. The funding for this effort in fiscal year 1999 was $500,000.

In a fiscal year 2000 project, NHTSA is identifying specific enforcement practices that show promise for deterring aggressive driving. In addition, this project is developing a public education effort to increase the public's perception of high risk driving behavior. The cost of this project is $115,000.

An estimated $20,000 in fiscal year 2000 is also being used to fund a law enforcement officer to work with NHTSA on a one-year assignment to collect and summarize information from law enforcement agencies across the nation that are conducting aggressive driving programs. This information will then be entered into a database of aggressive driving programs which can be used by other law enforcement agencies.

NHTSA and FHWA have convened an Aggressive Driving Implementation Group to review progress in implementing the recommendations from the 1999 Aggressive Driving and the Law symposium. The group has reviewed recommendations from this symposium and is currently establishing priorities, identifying partners, and determining the next steps for developing a National Action Plan. A total of $60,000 has been identified to support this activity for fiscal year 2000.

TRAFFIC LAW ENFORCEMENT FUNDING

Question. Please provide a table for the components in the Traffic Law Enforcement Program which shows how funds requested for fiscal year 2001 are intended to be spent. In that table, please compare the amount provided for similar activities for fiscal year 2000 and provide a justification for the need for the requested increases above fiscal year 2000 appropriations.

Answer. Efforts to reduce impaired driving, speeding, aggressive driving, and other unsafe driving acts in addition to promoting increased seat belt and child safety seat use are critical responsibilities of our nation's law enforcement agencies.

The fiscal year 2000 and fiscal year 2001 funding levels for the five Traffic Law Enforcement Program components are as follows:

Program area	Fiscal year 2000	Fiscal year 2001
Enforcement Demonstrations	$700,800	$903,000
Training and Technical Assistance [1]	400,000	1,279,000
Technology Transfer	100,000	262,000
National Organizations	460,200	452,000
Public Information and Education	375,000	446,000
Total	2,036,000	3,342,000

[1] Congress has directed that NHTSA provide Pursuit Management training and TEA–21 authorized $1M to fund this program.

The Traffic Law Enforcement budget directly supports both TEA–21 initiatives and the agency's strategic plan to increase seat belt usage and reduce impaired, speeding and aggressive drivers.

The fiscal year 2001 budget request seeks continued funding for our current partnerships with national law enforcement associations such as the International Association of Chiefs of Police, the National Sheriffs Association, the National Organization of Black Law Enforcement executives, and others. These partnerships provide an efficient and economical method of promoting our traffic safety initiatives. In ad-

dition, funding is needed for other traffic law enforcement projects that are included in the DOT and NHTSA Strategic Plan. The additional funds are needed to:

—Provide seminars on Traffic Safety in the New Millennium: Law Enforcement Strategies for law enforcement executives, designed to enable and prepare them to address emerging traffic safety challenges;

—Provide a seminar on newly developed technologies designed to supplement law enforcement efforts through automated enforcement of red-light running, speeding, and railroad crossing violations;

—Develop a resource guide for new technologies to ensure the accuracy and reliability of enforcement devices for enforcement agencies, the courts, and the motoring public;

—Develop a training program for law enforcement administrators designed to aid in developing a broader, general emphasis on traffic safety related programs while protecting the individual rights of the motoring public; and

—Continue the development of the aggressive driving public in formation materials.

INTEGRATED DRIVER LICENSING SYSTEM

Question. What is the status of the comprehensive integrated driver licensing system? What costs, broken out by year, are associated with its development? How much work remains to be done to fully implement the system?

Answer. Currently, NHTSA is preparing a Report to Congress regarding the National Driver Register's (NDR's) Problem Driver Pointer System (PDPS), operated by NHTSA, and the Commercial Driver License Information System (CDLIS), formerly operated by the Federal Highway Administration (FHWA) and now operated by the Federal Motor Carrier Safety Administration (FMCSA). This evaluation, required by the Transportation Equity Act for the 21st century (TEA–21), focuses on the ability of these two systems to transfer records electronically and to identify drivers with multiple licenses.

NHTSA is also conducting an assessment of various technologies to facilitate processing of the large volume of data and transactions which would be associated with an integrated driver licensing system. The total expenditure for this activity, also required by TEA–21, is $250,000provided to the American Association of Motor Vehicle Administrators (AAMVA). No additional funds have been provided for this activity.

Much of the information for the Report to Congress comes from a 1997 study, conducted by NHTSA, FHWA, and AAMVA, which recommended combining PDPS and CDLIS with the Driver License Reciprocity (DLR) System (operated by AAMVA) to form an integrated national system. This report suggested that such a system would greatly facilitate the ability of motor vehicle administrators to transfer records electronically and to identify drivers with multiple licenses.

There are some significant obstacles which must be overcome before such a system, which would contain information on nearly 200 million drivers, can be fully developed. First, as the 1997 Report concluded, some form of unique identifier (e.g., social security number) will be needed to differentiate between potentially thousands of similar records in the system (e.g. nearly 2.4 million persons have the surname "Smith"). This need for a unique identifier has been strongly opposed by privacy advocates. Second, in order to identify drivers with multiple licenses, it will be essential that all states participate. Finally, the costs associated with developing such a system will be formidable. Each of these issues will be addressed in the Report to Congress.

OLDER DRIVER PROGRAM

Question. In Senate Report 104–325, the Committee indicated that NHTSA should continue its work on demonstration activities for technologies and practices intended to improve driver performance of older drivers at risk of losing their licenses. How is that directive reflected in the fiscal year 2001 budget request and in the fiscal year 2000 spending plan for the transportation safety program? Please provide a list of each activity and its spending level.

Answer. For the fiscal year 2001 budget request, $300,000 is planned for conducting up to three demonstration activities designed to enhance the safety and mobility of older drivers and pedestrians. NHTSA is still reviewing program alternatives to determine which specific programs will be demonstrated. Programs under consideration include: senior fitness programs that incorporate pedestrian safety and driving health; conducting assessment activities at senior health fairs; and assistance to a state licensing authority's medical advisory board to develop an evaluation program for referrals that is grounded in research. For the fiscal year 2000

spending plan, $130,000 is planned for conducting demonstration activities specifically for identification and potential rehabilitation of at-risk older drivers.

Question. How many states are involved in older driver demonstrations supported with NHTSA funds?

Answer. Three states are currently involved in NHTSA older driver demonstrations. They are as follows:

—Maryland is conducting an effort to determine the value of the Gross Impairment Screening tool (GRIMPS) as a means for identifying potential problem drivers in Department of Motor Vehicle (DMVs) settings and in senior centers and its value in providing counseling or rehabilitation to such persons.

—Florida is involved in a project to assess the value of using an automated version of GRIMPS for identifying problem drivers. The program, which will be administered in memory clinics, aims to address those drivers whose cognitive abilities may have declined and who may be unaware of how the declines are affecting their driving. Beyond simply assessing individuals with cognitive impairments, the program also aims to provide counseling with regard to potential rehabilitation or, if indicated, counseling individuals to stop driving and use other options.

—Texas is in the process of documenting a program on elderly pedestrian, bicyclist, and driver safety that is operated by the Texas Department of Health and the Texas Department of Transportation. This very successful and popular program will be described in an evaluation report so that people in other states or local agencies can copy components of the program. This effort also involves modifying portions of the program to meet the needs of Spanish-speaking older adults, a large audience that has remained largely unaddressed.

Question. How much is allocated toward those efforts in fiscal year 2000? Will those efforts be expanded during fiscal year 2001? How much is requested for those efforts in fiscal year 2001?

Answer. A total $263,000 in funding is planned for fiscal year 2000 older driver demonstration projects. Depending on the outcomes of the efforts in Florida, Texas, and Maryland, NHTSA will either fund additional activities at these sites or, if the results are sufficiently definitive, new demonstrations will be initiated. These additional activities might include aiding the Maryland medical advisory board in adapting assessment tools for use on referred drivers. Another program could entail the use of automated assessment tools at senior health fairs to generate an understanding among seniors of how their health influences their driving. For fiscal year 2001, $300,000 has been requested for demonstration projects on older driver and pedestrian safety. Thus, the level of effort will increase slightly in fiscal year 2001.

HIGHWAY SAFETY RESEARCH

Question. Please break out how the $7.446 million requested under highway safety research would be allocated.

Answer. The Highway Safety Research breakdown is as follows:

Impaired Driving	$1,900,000
Occupant Protection	1,400,000
Older Driver	850,000
Pedestrian and Cyclist	876,000
Speed & Aggressive Driving	1,120,000
Emergency Medical Services	400,000
Evaluation	650,000
Driver Fatigue & Inattention	250,000
Total	7,446,000

NATIONAL OCCUPANT PROTECTION USE SURVEY

Question. What are the status and the results to date of the National Occupant Protection Use Survey?

Answer. The results of the National Occupant Protection Use Survey (NOPUS) to date are as follows:

TABLE 1.—NATIONAL OCCUPANT PROTECTION USE SURVEY—MOVING TRAFFIC STUDY

Belt and helmet use	Percent restraint use		
	Fall 1994	Fall 1996	Fall 1998
Overall	58	61	69
Drivers	59	62	70
Passenger	55	59	65
Passenger Cars	63	65	71
Drivers	64	65	72
Passengers	59	62	68
Other Pass Vehicles	50	56	66
Drivers	51	58	67
Passengers	49	53	61
Helmet Use	63	64	67
Operators	67	66	64
Riders	54	58	84

The restraint use rates presented in Table 1 were obtained through the Moving Traffic Study portion of the NOPUS which provides overall restraint use rates for drivers and right front passengers in passenger vehicles (passenger vehicles are defined as passenger cars, pickup trucks, vans, and sport utility vehicles).

TABLE 2.—NATIONAL OCCUPANT PROTECTION USE SURVEY CONTROLLED INTERSECTION STUDY

[Percent Restraint Use by Year, Age, Sex, Race, and Urbanization]

	Year		
	1994	1996	1998
Age:			
Infant	87.7	85.2	96.9
Toddler	60.7	60.1	90.7
Youth	57.7	64.6	71.8
Young Adult	52.6	49.5	57.2
Adult	[1] 59.1	62.4	69.8
Senior	[1] 59.1	68.8	77.3
Sex:			
Female	64.4	68.0	76.3
Male	54.4	56.8	62.8
Race:			
White	59.6	62.6	69.8
Black	53.0	51.2	65.4
Other	54.6	58.0	65.3
Urbanization:			
City	57.7	61.1	73.8
Suburban	62.9	64.4	66.5
Rural	52.8	60.1	66.7

[1] 1994 NOPUS collected only Adult (25 years or older).

Table 2 shows the restraint use rates obtained from the Controlled Intersection Study portion of the NOPUS which provides more detailed information about shoulder belt use by type of vehicle and person characteristics and child restraint use for occupants of passenger vehicles.

EMERGENCY MEDICAL SERVICES (EMS)

Question. How much funding is NHTSA requesting to fund the proposal to develop strategies for wireless E9–1–1? Please explain the specific projects of this proposal and the level of funding associated with each.

Answer. More than 100,000 wireless emergency calls are made per day across the United States. The dramatic increase in the use of wireless technology to call for help has heightened the need to address institutional and other barriers to effective

management of these important calls, including proper call routing. The fiscal year 2001 budget request includes $162,000 to complete funding of a three-year demonstration program in New York. This project will model strategies for overcoming a range of institutional barriers to implementing wireless E9–1–1. The total cost of this project will be $962,000, with $600,000 being contributed by the Intelligent Transportation System program and the remainder from the EMS Program.

To implement wireless E9–1–1, states need to resolve a number of institutional issues, such as determining which state agency will control the routing of wireless emergency calls. The New York demonstration will model a consensus approach to resolving these issues, led by members of the emergency medical community. The emergency medical community is particularly well positioned to host these negotiations, since they are focused on quick resolution of the issues and are unbiased concerning specific institutional arrangements. Resolving the wireless E9–1–1 issue was one of the top priorities in the recent EMS strategic planning document, the EMS Agenda for the Future.

Question. What are the planned activities and funding amounts requested for the proposal to train emergency dispatchers for wireless 911 calls?

Answer. With more than 100,000 wireless emergency calls per day coming in to Public Safety Answering Points (PSAP's) across the country, emergency dispatchers must be prepared to receive the calls, identify location of the incident (with help of emerging technologies) and dispatch appropriate EMS, fire or law enforcement resources to thescene.

NHTSA is requesting approximately $100,000 to develop training materials and outreach techniques to help local dispatch centers implement wireless E9–1–1. To begin receiving and responding to wireless E9–1–1 calls, each of the approximately 6,000 PSAP's across the nation will need to make changes to current procedures and equipment. This project will speed the adoption of these changes by ensuring that dispatch centers receive accurate information and guidance. The training is expected to include details about relevant federal rules and regulations, options for local institutional arrangements, and details on technology choices.

NATIONAL BYSTANDER TRAINING

Question. What are the objectives of the national bystander caren training network? Please break down funding requested for this activity and compare to fiscal year 2000.

Answer. Uninjured vehicle occupants or other motorists are often the first people at the scene of a motor vehicle crash. These "bystanders", with proper training, could provide valuable lifesaving assistance until emergency personnel arrive at the scene. During fiscal year 2000, NHTSA is introducing a bystander care program to prepare motorists to take proper actions when coming on the scene of a recent crash. The program instructs the motorist to immediately call 9–1–1 and then render lifesaving medical care, if needed, while waiting for emergency medical services to arrive.

The bystander care program encourages medical professionals to teach hands-on training to the public. In fiscal year 2000, NHTSA dedicated $75,000 to initiate an outreach program to fund the costs of conducting national bystander care training. These funds were distributed through a number of national medical associations to provide bystander care training at ten national medical conferences. The goal is to establish a nationwide database network of bystander trainers.

In fiscal year 2001, an additional $50,000 will be directed to completing the training initiatives by funding five additional training sessions in selected states.

EMS AND SAFE COMMUNITIES NETWORK

Question. Please explain in detail by project or activity the proposal to expand EMS involvement in delivering community traffic safety messages through the Safe Communities network. Is it necessary to utilize the Safe Communities network to expand EMS involvement in public safety campaigns?

Answer. The 1996 EMS Agenda for the Future, a consensus strategic planning document supported by NHTSA, highlighted the importance of EMS participation in prevention activities and specifically pointed out the value of EMS involvement in the Safe Communities program. In fiscal year 2000, NHTSA responded to this recommendation by initiating a revision of the EMS PIER (Public Information, Education and Relations) program to incorporate a module on Safe Communities. The agency's fiscal year 2001 request includes funds to complete this revision.

The PIER program was developed in 1996 to encourage and prepare EMS personnel to conduct community education activities. The program instructs EMS personnel in community outreach and media skills. The new module will educate EMS

providers concerning their potential role in Safe Communities either as leaders or participants.

While it is not necessary to use Safe Communities to engage EMS personnel in prevention activities, this approach offers an attractive incentive and efficient mode of giving EMS a clear and appropriate role in community injury prevention.

EMERGING TRAFFIC ISSUES

Question. Please break out in detail by project or activity how NHTSA proposes to use the $1,500,000 requested for new/emerging issues and compare the requested amount to the allocation for fiscal year 2000.

Answer. Last year, Congress appropriated $1,000,000 for NHTSA to use for new, emerging, and Transportation Equity Act for the 21st Century (TEA–21) issues.

Primarily, the funds are used to develop, print and distribute program materials, including aggressive driving, older drivers, and drowsy driving, specifically identified by emerging research, and requiring NHTSA's attention. Surveys suggest that aggressive driving is becoming the top highway safety concern of the public. As the Baby Boomers move into their later years, demographics show that problems facing the older driver are becoming an increasing problem. A number of states have identified drowsy driving as a significant problem; 70,000 injury-causing crashes and 1,550 fatalities annually are attributed to drowsy driving. Specifically, the agency is (1) collaborating with the Outdoor Advertising Association of America, Inc. on a national campaign (billboards and bus placards) to curb aggressive driving; (2) partnering with USAA to develop, and the American Association of Retired People to develop, market and distribute materials targeted to consumers and care providers to help older drivers remain safe and mobile as long as possible; and (3) working with the Network of Employers for Traffic Safety to market and distribute the drowsy driving comprehensive program materials targeted to shift workers and their families. Additionally, these funds are being used for large-scale revisions to all of the NHTSA Professional Development training programs for state and local highway safety officials in order to incorporate major changes in programs due to the Transportation Equity Act for the 21st Century (TEA–21). In addition, a new one-half day course has been developed to provide a TEA–21 presentation piece for use with highway safety executives and new employees.

With the training completed, the agency would continue the activities initiated in 2000 and would initiate the following activities with the $1,500,000 requested: (1) expand the drowsy driving program materials to include the high-risk group that includes high school youth and college students; (2) develop additional older drivers program materials, market and distribute the program and materials to additional intermediaries such as the increasing number of senior centers, geriatric physicians, law enforcement, and the courts; (3) develop new and focused media messages relating to aggressive driving behaviors as we identify additional high risk groups, and materials on aggressive driving; and (4) raise awareness and develop countermeasures for the increasing problems related to increased activities inside the vehicle, such as the use of cell phones, eating, reading, putting on make-up and faxing, which can overload the driver with distractions.

TRAFFIC SAFETY DATA SYSTEMS

Question. How much funding is NHTSA requesting to assist states in developing and implementing traffic safety data systems?

Answer. Traffic safety data systems are critical for the identification of traffic safety problems and for the effective evaluation and management of traffic safety programs. One of the major deficiencies in state traffic safety data systems is the tracking and exchange of citation and driver history information. For this reason, NHTSA is requesting $325,000 to assist states in developing and implementing data systems that allow for information tracking and exchange. These funds will specifically be used for the development, testing and implementation of traffic safety data technologies that facilitate the exchange of traffic citation and driver history information between law enforcement, the courts and driver licensing agencies. This effort will be conducted in conjunction with the Federal Motor Carrier Safety Administration (FMCSA), which has been mandated by the Motor Carrier Safety Improvement Act of 1999 to implement traffic safety data systems that integrate driver citation and conviction information.

Question. What is the difference between the funding in the highway safety account for state safety records and the Section 411 incentive grants?

Answer. Over the last 20 years, state and locally provided resources for traffic safety data systems have eroded. This has had negative consequences for state and national data bases that are used to identify traffic safety problems and evaluate

implemented traffic safety countermeasures. As a result of the decreased state and local resources, funding in the highway safety account is used for traffic safety data system activities that provide information on both standards and best practices that allow a state or local traffic safety organization to maximize their available resources. Some of the activities funded by the highway safety account include local, state and national traffic safety data system conferences and meetings, traffic safety data systems assessments that provide information on best practices, data analysis courses and other training that promote effective problem identification and evaluation processes, and development, revision, and implementation of standards such as ANSI D16, ANSI D20, and the Model Minimum Uniform Crash Criteria (MMUCC). The adoption of traffic safety data system standards is critical if the impact of implemented traffic safety activities is to be compared over time and across geographic areas.

Section 411 incentive grants are managed and coordinated by the states. Funds can be used for a number of state and local data system improvements and activities such as infrastructure development and improvement, data collection, data management, system linkages, and data access technologies. For many states, the availability of 411 funds has been an important resource for making improvements to their traffic safety data system.

SAFE/LIVABLE COMMUNITIES

Question. The Department has delegated NHTSA as the coordinator of the "Livable Communities" initiative. Please explain this initiative in greater detail and identify the modes, specific programs, and amounts that are being requested to further it.

Answer. The Safe/Livable Communities Initiative incorporates safety and injury prevention programs into all Departmental programs involved with "quality of life" issues (i.e. Transportation and Community and System Preservation Pilot Program, Rural Initiative, and Livability Initiative). The initiative promotes the implementation, in as many communities as possible, of programs designed to improve safety, efficiency and accessibility of all modes of transportation. Much of the technical assistance the Department provides at the community level is delivered through regional intermodal safety teams, working in concert with state transportation agency partners. The initiative also seeks to incorporate safety and injury prevention into community improvement programs sponsored by other federal agencies.

The safety elements of the initiative include:

—*Clearinghouse—$500,000.*—NHTSA will expand the Safe Communities Clearinghouse and website to incorporate information on other agency community-based transportation safety initiatives and will link to technical assistance sites.

—*Training—$450,000.*—NHTSA's Safe Communities Community Practitioner's Course and Intermodal/Interagency Executive Seminar will include information on ONE DOT safety messages and modal safety training programs.

—*Technical Assistance—$1,000,000.*—NHTSA will coordinate a network of multidisciplinary assessment teams of experienced practitioners to conduct assessments of communities' resources, safety problems, capabilities, and trends and provide an action plan for affecting improvements in the community.

—*Materials—$791,000.*—The Regional ONE DOT Teams are working across modes to develop and deliver similar safety messages, i.e., buckle up in the car, in the air and on the water, to the Department's wide range of partners.

—*Partnerships—$300,000.*—Through the Safe/Livable Communities Initiative, NHTSA can deliver its highway traffic safety message to partners to whom the agency might not have access otherwise. NHTSA is able to expand the agency's reach across the nation by having other modes and programs deliver buckle-up and impaired driving messages.

Each modal administration assigns staff to the Department's Community Outreach Task Force (chaired by NHTSA), which provides overall direction to the Safe/Livable Communities Initiative. Each mode has programs that enhance safety, mobility, economic development, environmental protection and other factors that impact the quality of community life. Each mode works within its organizational structure and budget to develop and support these programs. Through the Task Force, the modes lend overall support to one another's communication and outreach efforts, and help to promote them through their own networks of customers and partners. To date, these efforts have been part of the ongoing activities of the field staffs of the individual modes. It is not possible to segregate out the exact amount of funds that each agency will expend to support this effort.

Question. What are the differences between funding requested by NHTSA for this initiative and the Section 402 formula program and the Safe Communities program?

Answer. The Section 402 formula grant program provides funds to the states, the Indian Nations and the Territories to support a wide range of highway safety programs to reduce crashes, injuries and fatalities, including occupant protection, impaired driving, motorcycle safety, traffic records, and roadway safety programs. The states must direct at least 40 percent of these funds to support community level programs. Safe Communities is a tool for communities to utilize in identifying their own injury problems and developing solutions to those problems. At the discretion of the states, Section 402 funding can be used to support Safe Communities.

The Safe/Livable Communities Initiative seeks funding for the Department of Transportation efforts to incorporate safety and injury prevention programs into the vast array of Departmental programs designed to make communities better places to live and work, such as the Transportation and Community and System Preservation Pilot Program, Rural Initiative, and Livability Initiative. To implement this effort in as many communities as possible, the funds will be used to support a clearinghouse, training, technical assistance, materials and partnerships—all developed intermodally. The initiative will be directed by the Department's Community Outreach Task Force, which has representation form all modes and is chaired by NHTSA.

ADVANCED AIR BAGS

Question. What is the status of your R&D to advance smart air bags? What are some of the remaining challenges and how does the fiscal year 2001 budget address them?

Answer. NHTSA recently completed near-term research and testing in support of the Final Rule to amend Federal Motor Vehicle Safety Standard (FMVSS) No. 208, "Occupant Crash Protection" to require advanced air bags. Full-vehicle crash tests were conducted with belted and unbelted mid-sized male and small female crash test dummies in different crash configurations, seating positions and impact speeds. Vehicles with advanced air bag technologies, such as dual stage inflators, advanced crash sensors, belt use sensors and seat position sensors were selected in the program. Air bag aggressivity tests were conducted with out-of-position small female driver dummies and child passenger dummies. NHTSA also completed a two-year cooperative agreement effort with a major air bag supplier studying dual stage air bag performance (both in terms of restraint potential and aggressivity to out-of-position occupants of various sizes). NHTSA also worked cooperatively with a vehicle manufacturer to test and evaluate pre-production prototype MY 2000 vehicles equipped with advanced air bag technologies. NHTSA continued another cooperative agreement working with a supplier on the development of a dynamic occupant sensing system for modulating air bag deployment. Additionally real world crash investigations are continually being collected and analyzed on redesigned air bag systems (model year 1998–2000 vehicles) and on air bag-related serious injury and fatality cases. High severity crashes in the National Automotive Sampling System were recently reviewed for cases where the air bag was determined to be the cause of the fatality or conversely, the air bag was not powered enough. Pediatric and small female injury research was continued, and assessment tools in predicting injury to out-of-position occupants were evaluated. NHTSA will be publishing its latest injury criteria formulations for the proposed family of dummies in the Final Rule on FMVSS No. 208.

The remaining challenges associated with smart air bag systems include the evaluation and development of production-ready occupant sensing systems. Research will continue to address the near-term development of pediatric and small female injury criteria associated with the intense and complex out-of-position air bag-vehicle occupant interaction. These efforts have as their goal the development of essential tools for the assessment of current and emerging air bag deployment systems. Additionally, research will continue on the development, performance, and monitoring of advanced air bag systems that build upon the technological solutions to air bag problems identified in the field experience, including those injuries resulting from aggressive air bag deployments (especially to children and occupants of short stature). Production vehicles with advanced safety systems will be evaluated and performance requirements established based on these systems. Such systems will include production multi-stage air bag inflators, air bag suppression technologies through occupant detection, seat position sensors, adjustable pedals, etc. Research will also continue on the development of improved air bag deployment timing through the use of anticipatory crash sensing technology. High speed (56 kmph) crash protection will continue to be evaluated for belted small female occupants in high severity crashes (and mid sized male occupant protection will be analyzed through NCAP performance testing). Also, research will include out-of-position occu-

pant tests (static and/or dynamic) to evaluate the performance of side air bags and other related systems, i.e., Inflatable Tubular Structure (ITS), deployable upper interior paddings, etc. During fiscal year 2001, over 400 advanced air bag and side air bag cases would be investigated. Research will continue to investigate, through its Special Crash Investigation program, approximately 200 motor vehicle crashes that qualify for NHTSA's Air Bag Investigations Program and non-air bag related vehicle safety problems.

ADVANCED AIR BAG FUNDING

Question. If this account were funded at $10 million above the fiscal year 2000 level, how would you allocate the fundings? Please explain your allocation within the context of your performance goals and strategic plan.

Answer. Funding would be allocated as follows:

Program area	Fiscal year 2000 level ($k) (a)	Fiscal year 2000 level + $10 M ($k) (b)	Delta ($k) (b – a)
Crashworthiness	8,858	9,901	1,043
NTBRC	13,232	14,200	968
Crash Avoid & Driver/Vehicle Perf	2,948	8,050	5,102
Heavy Vehicles	1,892	2,200	308
Fatality Analysis Reporting System	5,213	5,500	287
National Automotive Sampling System	9,987	10,200	213
Data Analysis Program	1,924	2,800	876
State Data Systems	2,344	2,500	156
Special Crash Investigation	1,553	2,600	1,047
Technology Transfer	0	0	0
PNGV	0	0	0
VRTC	950	950	0
Total, Research and Analysis	48,901	58,901	10,000

Over the past 30 years, NHTSA has developed successful strategies in addressing fatalities and injuries through occupant protection and injury mitigation vehicle based countermeasures. However, easy gains in safety improvements have already been made and new approaches through collision avoidance, driving behavior, driving performance, and driver-vehicle interaction research as well as research into the use of advanced technologies to occupant protection and human injury research must be undertaken to achieve the performance goals set by the agency. Additionally, monitoring of real-world safety performance of vehicles must continue at an increased pace to keep up with the changing vehicle technologies.

Question. If this account were funded at $8 million above the fiscal year 2000 level, how would you allocate the funding? Please explain your allocation within the context of your performance goals and strategic plan.

Answer. Funding would be allocated as follows:

Program area	Fiscal year 2000 level ($k) (a)	Fiscal year 2000 level + $8 M ($k) (b)	Delta ($k) (b – a)
Crashworthiness	8,858	9,401	543
NTBRC	13,232	13,700	468
Crash Avoid & Driver/Vehicle Perf	2,948	7,050	4,102
Heavy Vehicles	1,892	2,200	308
Fatality Analysis Reporting System	5,213	5,500	287
National Automotive Sampling System	9,987	10,200	213
Data Analysis Program	1,924	2,800	876
State Data Systems	2,344	2,500	156
Special Crash Investigation	1,553	2,600	1,047
Technology Transfer	0	0	0
PNGV	0	0	0
VRTC	950	950	0

Program area	Fiscal year 2000 level ($k) (a)	Fiscal year 2000 level + $8 M ($k) (b)	Delta ($k) (b – a)
Total, Research and Analysis	48,901	56,901	8,000

Over the past 30 years, NHTSA has developed successful strategies in addressing fatalities and injuries through occupant protection and injury mitigation vehicle based countermeasures. However, easy gains in safety improvements have already been made and new approaches through collision avoidance, driving behavior, driving performance, and driver-vehicle interaction research as well as research into the use of advanced technologies to occupant protection and human injury research must be undertaken to achieve the performance goals set by the agency. Additionally, monitoring of real-world safety performance of vehicles must continue at an increased pace to keep up with the changing vehicle technologies.

NATIONAL ADVANCED DRIVING SIMULATOR (NADS)

Question. Please delineate funding requests, by project, for operation of the NADS.

Answer. The following human factors research projects are being planned on the NADS. They will be conducted utilizing up to $5 million of the fiscal year 2001 budget request. The detailed spending plan will be determined only after the final appropriation of the funds.

—Relationship between Blood Alcohol Concentration (BAC) and driver performance under demanding driving situations
—Driver Distraction due to advanced in-vehicle communications systems
—Identification of driver cues in rollover crashes

DRIVER DISTRACTIONS

Question. Please discuss the scope, nature, and anticipated funding amount for research regarding driver distractions.

Answer. NHTSA's program of research on driving distraction is a coordinated effort involving the total human factors research spectrum for which a total of up to $7 million may be allocated. To address concerns on the level of driver distraction caused by advanced information and communication systems, the Office of Human Centered Research will conduct research using the National Advanced Driving Simulator (NADS). Initial efforts will focus on: (1) the relative safety of using various types of wireless devices (e.g., cell phones) including hand-held, hands-free and voice activated systems in vehicles, and (2) the level of driver distraction from more complex information systems, including navigation, e-mail and general Internet access.

This effort will develop design guidelines that will assist vehicle designers in successfully integrating communication services and will synthesize the results for major in-vehicle systems to ensure that drivers can safely and effectively process inputs from multiple information sources. The NADS will be used to identify knowledge gaps and to help determine the optimal manner of organizing and presenting in-vehicle information to drivers and preferable control/display characteristics. Integration of information for the driver will include such areas as message priority, multiple sensory channels, and modes of driver-information integration.

NATIONAL TRANSPORTATION BIOMECHANICS RESEARCH CENTER (NTBRC)

Question. With respect to the medical institutions, hospitals, trauma centers, and universities that are under contract to NHTSA in support of the biomechanics program, what is the nature of research and level of funding at each of them?

Answer. The following lists the medical institutions, hospitals, trauma centers, and universities supporting the NHTSA's biomechanics program, the nature of the research they are providing, and their individual fiscal year 2000 levels of funding:

—Children's National Medical Center (Washington, DC): $400,000—Crash Injury Research and Engineering Network (CIREN) participant with emphasis on pediatric injuries.
—Duke University: $300,000—Experimental investigations quantifying mechanisms of injury to cervical spine.
—Harborview Hospital (Seattle, WA): $400,000—CIREN participant with emphasis on pediatric injuries.
—Johns Hopkins University/Applied Physics Laboratory (Baltimore, MD):—$140,000—Experimental and analytical investigations of mechanisms of injury to lower body.

—Lehman Research Center/University of Miami (Miami, FA): $400,000—CIREN participant with emphasis on thoracic injuries.
—Medical College of Wisconsin: $500,000—Experimental investigations quantifying mechanisms of injury in side impact, cervical spine injuries, and lower extremity injuries.
—National Study Center for Trauma and Emergency Medical Services (Baltimore, MD): $400,000—CIREN participant with emphasis on orthopaedic injuries.
—Ohio State University (Columbus, OH): $200,000—Experimental biomechanics quantifying mechanisms of injury in side impact crashes.
—San Diego County Trauma System (San Diego, CA): $400,000—CIREN participant with emphasis on regional EMS issues.
—University of Medicine and Dentistry (Newark, NJ): $400,000—CIREN participant with emphasis on frontal and side impact crashes.
—University of Alabama (Birmingham, AB): $1,250,000—Experimental biomechanics investigating mechanisms of injury to the brain, pelvis, and lower extremities. (also Mercedes funded CIREN participant).
—University of Virginia (Charlottesville, VA): $1,051,000—Experimental biomechanics investigating mechanisms of injury to the thorax and lower extremities in frontal crashes, thoracic and abdominal injuries resulting in out-of-position situations, and evaluation of advanced test dummy components.
—University of Michigan (Ann Arbor, MI): $140,000—Experimental biomechanics efforts investigating mechanisms of injury to thorax, lower extremities, and the pelvis. $400,000—CIREN participant with emphasis on trauma and burns.
—University of Washington (Seattle, WA): $138,000—Experimental investigations quantifying injury mechanisms to the pediatric cervical spine.
—Veterans Administration Medical Center (Milwaukee, WI): $200,000 from previous fiscal year—Experimental investigations quantifying injury mechanisms to the pediatric and adult cervical spine.
—U.S. Army Medical Research Command: $700,000—Development of advanced head/brain and torso injury criteria, assessment of motorcycle helmet performance, research in airbag noise-related ear injuries, and quantifying airbag-occupant interaction when in close proximity.

Question. Congress has urged NHTSA to redouble its efforts to obtain cost-sharing with other organizations which benefit from the national center. What progress has been made?

Answer. The National Transportation Biomechanics Research Center (NTBRC) has entered into a long term Cooperative Agreement with the Daimler Chrysler Corporation to fund a new Crash Injury Research and Engineering Network (CIREN) center at the University of Alabama at Birmingham Medical Center. The center is being funding by Daimler Chrysler at $500 thousand per year for two years with options for renewal for an additional three years. The NTBRC is also in the final stages of negotiation with a major domestic auto company to fund another CIREN center in Virginia. Additionally, the NTBRC has employed "Cooperative Agreements" as its main contractual mechanism with its university-based research organizations whereby they contribute a negotiated additional portion of support, in kind, to the total research effort, either in the form of enhanced facilities, additional equipment, and/or more staff time.

Other significant cost-sharing opportunities have been created by the NTBRC's world-wide cooperative efforts to have interested parties evaluate the performance of NHTSA's new advanced frontal dummy, THOR. By offering use of the physical device along with technical support, more than 16 research organizations, from both other governments and the automotive industry, have extensively tested this device and shared their test results and analyses with the NTBRC. This has offered the participants the opportunity to preview and gain experience with NHTSA's newly developed testing technologies as well as providing the NTBRC the equivalent of more that $2 million worth of testing effort without charge.

NHTSA has also had other agencies, such as the Federal Railroad Administration and the Federal Aviation Administration, using the agency's dummies for evaluation of occupant protection in rail and airline transportation.

CIREN CENTERS

Question. How much funding was provided to each of the CIREN centers in fiscal year 1999 and fiscal year 2000? What is the budget request for each of the CIREN centers for fiscal year 2001?

Answer. The funding and budget request follow:

CIREN Center	Fiscal year 1999	Fiscal year 2000	Fiscal year 2001
Lehman Research Center/University of Miami	$425,000	$400,000	[1] $500,000
University of Medicine and Dentistry	425,000	400,000	[1] 500,000
National Study Center for Trauma and Emergency Medical Services	425,0090	400,000	[1] 500,000
Children's National Medical Center	425,000	400,000	[1] 500,000
Harborview Hospital:			
General Motors [2]	150,000	0	0
Federal	133,000	400,000	[1] 500,000
University of Michigan:			
General Motors [2]	150,000	0	0
Federal	133,000	400,000	500,000
San Diego County Trauma System:			
General Motors [2]	150,000	0	0
Federal	133,000	400,000	500,000
University of Alabama: Mercedes [3]	500,000	500,000	500,000
New CIREN Center	0	0	[1] 500,000
Total	3,049,000	3,300,000	4,500,000

[1] Pending fiscal year 2001 Authorization, requested increase will enable centers to collect and analyze additional biomechanics measurements for CIREN.
[2] General Motors Funded CIREN Center.
[3] Mercedes Funded CIREN Center.

INTELLIGENT VEHICLE INITIATIVE (IVI)

Question. Please break out in detail by project or activity how NHTSA proposes to use the $30,000,000 requested for the IVI program and compare that to spending in the area in fiscal year 2000.

Answer. Please see the table below. This table includes all IVI projects funded by the DOT Intelligent Transportation System's (ITS) Joint Program Office; those that involve NHTSA, as well as those that do not. NHTSA staff will serve as contract technical representatives on several light vehicle research projects, however only about $7 million of these funds will be obligated for ongoing research projects through NHTSA's Office of Contracts and Procurement.

Activity/project	Fiscal year 2000	Fiscal year 2001
1. Generation 0 Operational Tests and Evaluations	$5,500,000	$4,600,000
2. Generation 1 Rear-End Collision Avoidance System Field Test and Evaluation	4,250,000	[1] 4,500,000
3. Generation 1 Rear-End Collision Avoidance Systems Research	1,400,000	[2] 700,000
4. Generation 1 Lane Change/Merge Collision Avoidance Systems Research	850,000	1,900,000
5. Generation 1 Road Departure Crash Avoidance Systems Research	2,250,000	1,000,000
6. Generation 1 Safety Impacting Systems Research	335,000	([3])
7. Generation 1 Electronic Braking Systems for Commercial Vehicles	250,000	0
8. Generation 1 Commercial Vehicle Stability System Field Test and Evaluation	0	1,000,000
9. Generation 1 Drowsy Driver System Field Test and Evaluation	1,000,000	1,500,000
10. Generation 1 Pedestrian Safety Systems Research	0	600,000
11. Enabling Research for Multiple Systems Integration	940,000	[4] 500,000
12. Enabling Research for Forward Collision Warning	500,000	([5])
13. Enabling Research on Driver Workload Metrics	600,000	500,000
14. Enabling Research on Enhanced Digital Maps	1,500,000	([6])
15. Enabling Research on Transit Rear-End Collision Avoidance Systems	550,000	0
16. Transit Rear-End Collision Avoidance Systems Field Test and Evaluation	0	1,500,000
17. Cross Cutting Human Factors Research into Information Systems, Societal and Institutional Issues, and Cost Benefit Methodology	425,000	600,000
18. Generation 2 Rear-End Collision Avoidance Systems Research	0	700,000
19. Generation 2 Road Departure Crash Avoidance Systems Research	0	1,000,000

Activity/project	Fiscal year 2000	Fiscal year 2001
20. Driver Vision Enhancement Research	([7])	[4] 250,000
21. Intersection Collision Avoidance Systems Research	800,000	[8] 2,000,000
22. Generation 2 Cross Cutting Research on Sensor Friendly Roadway, Short Range Communication, Radio Navigation, and Cooperative System Requirements	500,000	1,000,000
23. Generation 2 Commercial Vehicle Stability Systems Research	0	700,000
24. Program Support	1,351,000	[9] 2,450,000
Total Budget Request	23,001,000	30,000,000

[1] NHTSA—GM Project under Cooperative Agreement.
[2] NHTSA—Naturalistic Driving Data Collection.
[3] Continued under (11) below.
[4] NHTSA Project.
[5] Continued under (3) above.
[6] Continued under (3)–(5) above.
[7] Continued under (6) above.
[8] NHTSA Project for Data Collection—$550K.
[9] NHTSA Project for Data Collection—$400k.

Notes:
—Generation 0 will assess the technical performance, determine user acceptance, and measure the benefits of driver assistance systems that are expected to enter production preparation by 2003.
—Generation 1 is expected to address systems with more advanced capabilities than Generation 0, higher levels of integration and increased infrastructure cooperation, and focus mainly on driver warning and assistance systems.
—Generation 2 is expected to build on the accomplishments of Generation 1, especially with a greatly increased role of infrastructure-vehicle cooperation.

CRASH OUTCOME DATA EVALUATION SYSTEM (CODES)

Question. Please update your answer from last year's hearing record regarding how NHTSA has conducted work beyond the CODES project in the areas of injury assessment, costs, and relationships to the use of seat belts, air bags, and other engineering enhancements.

Answer. In fiscal year 2000, NHTSA funded four new CODES states—Arizona, Delaware, Minnesota, and Tennessee—to continue the implementation of Crash Outcome Data Evaluation Systems (CODES) and the development of state-specific applications for the CODES linked data. These four states plan to focus on safety belt and roadway issues by comparing injury severity and average hospital inpatient charges for restrained and unrestrained victims of motor vehicle crashes. Arizona plans to evaluate belt effectiveness in terms of sex and age group, geographic location, type of road and driver characteristics. Delaware wants the linked data to support primary belt legislation and identify costs and injuries suffered by children involved in motor vehicle crashes.Minnesota will partner with the surrounding CODES states (Iowa, North Dakota, South Dakota and Wisconsin) to identify the public's share of the costs associated with non-use of safety belts. Tennessee proposes to determine the relationship between the driver, vehicle, roadway and crash characteristics and to use this information to support law enforcement, EMS, roadway engineering and other prevention efforts. Also, in fiscal year 2000, NHTSA has published "Standardizing Reporting Using CODES" which presents management formats for reporting medical and financial outcome information related to the use of seat belts, air bags, and other engineering enhancements. In addition, ten existing CODES states will be funded by NHTSA during May 2000 to develop a CODES Data Network. Through this network, NHTSA and the Data Network states will collaboratively evaluate crash injury costs and outcome by payer source, air bag location, lateral impact crashes for vehicles of a particular size and weight, injury type including lower extremity injuries and injury patterns for the most recent five year period. As the Data Network expands with the addition of more linked data from both existing and new Data Network states, the range of research opportunities for NHTSA analysts and the state CODES experts also will expand.

Question. How is this different from the Section 411 grant program?

Answer. The Section 411 grant program provides three levels of funding to states to organize a Traffic Records Coordinating Committee (TRCC), develop a plan and then implement the plan for developing or improving their traffic records. CODES, in comparison, does not fund the development of traffic records data systems. Instead, it adds value to existing traffic safety data by linking them to medical and financial outcome information related to motor vehicle crashes. Data quality problems which are identified during the linkage process can be forwarded to the respec-

tive data owners. This feedback information, available to the states which have implemented CODES, is useful to the TRCC to target those areas that need the most resources. In turn, CODES benefits when the quality of the data files being linked improves.

AUTOMATIC CRASH NOTIFICATION (ACN)

Question. Your agency is requesting funding for automatic crash notification (ACN) in several different programs. Please provide a table that lists each request for ACN, the amount requested, and a description of each item.

Answer. The table below provides the requested information. This research will address the final issues to fine tune capabilities demonstrated in a recent field operational test of ACN by NHTSA, and should facilitate the deployment of this type of system.

Budget Request	Funds Requested	Description
Special Crash Investigations of ACN vehicles.	$300,000	The Special Crash Investigations Program will team with an industry partner (e.g., General Motors) to perform 10 or more in-depth investigations for crashes involving vehicles with a current ACN-like system such as OnStar. This knowledge will help inform development of evaluation criteria for triage procedures for injured occupants.
Injury Prediction Algorithms.	150,000	This research will lead to advanced injury prediction algorithms so that more detailed and appropriate warnings can be automatically sent to EMS dispatch centers by advanced ACN systems.
Advanced Technologies for ACN Communication.	376,893	This research will explore transmission alternatives and develop institutional requirements to enhance the readiness of the 911 community to receive and process automatic crash notification transmissions from vehicles.

AUTHORIZED FULL TIME POSITIONS (FTP'S) AND ON-BOARD STRENGTH

Question. Please provide a table that compares, by office, authorized full time employees to actual filled positions.

Answer. The following table compares the authorized full time positions to on-board full time positions by office as of February 29, 2000.

AUTHORIZED FTP'S AND ON-BOARD STRENGTH BY OFFICE

	Authorized FTP	Actual FTP
Safety Performance Standards	69	58
Safety Assurance	97	92
Traffic Safety	203	194
Research and Development	124	103
Office of the Administrator and Staff Offices	60	56
General Administration	111	103
Totals	664	606

NHTSA ON-SITE CONTRACT EMPLOYEES

Question. During the last three years, how many outside employees are under contract with NHTSA? How much was spent on contract employees in each year? How much is estimated to be allocated in fiscal year 2001?

Answer. Listed below is the information requested for NHTSA contractor employees working on-site in the Nassif Building.

[In million of dollars]

Fiscal year	No. Contractor employees	Expended	Expended/projected	Planned allocation
1998	117	$8.28		
1999	127	11.89		
2000	116		$11.48	
2001	108			$11.98

ADMINISTRATIVE EXPENSES

Question. For fiscal year 1999, fiscal year 2000, and planned for fiscal year 2001, please provide a table similar to that provided previously to the Committee, showing the amount of funds spent or allocated for non-mandatory awards and bonuses, PCS, overtime pay, travel and training.

Answer. The following is a table showing the costs for awards and bonuses, PCS, overtime pay, travel and training:

[Dollars in thousands]

	Fiscal year 1999 actual	Fiscal year 2000 enacted	Fiscal year 2001 request
Awards and Bonuses	$707	$761	$820
PCS	87	87	87
Overtime Pay	131	200	215
Travel	1,141	1,155	1,777
Training	207	216	219

HIGHWAY SAFETY DATA SYSTEMS AND TRAFFIC RECORDS GRANTS (SECTION 411)

Question. Please describe how the Highway Safety Data Systems and Traffic Records Grant Program is being implemented. How are the states using the funds received.

Answer. By January 15 of each year, states can submit an application for a Highway Safety Data Systems and Traffic Records grant. A state that applies for a grant for the first time has three options for which it may apply: (1) an implementation grant, which requires that the state have in place a traffic records coordinating committee, an assessment or audit of its traffic records system that was conducted or updated within the past five years, and a strategic plan for effecting traffic records system improvements; (2) an initiation grant, that also requires an in place traffic records coordinating committee and an audit or assessment within the past five years, but only requires that development of a strategic plan has begun; or, (3) a start up grant, that requires the state to certify that it does not meet the criteria for either an implementation or an initiation grant. In fiscal year 2000—the second year of this program—NHTSA awarded 46 grants totaling $7.6 million to 42 states, Puerto Rico, American Samoa, Guam, and Northern Marianas. Initiation grants ($96,480 each) were awarded to 5 states and implementation grants ($173,600) to 37 states, Puerto Rico, and the three territories. All states that applied received funding.

A state that has previously received only a start up grant may apply for either an initiation or an implementation grant in a subsequent year, under the same criteria listed above. A state that has previously received either an initiation or an implementation grant may apply for a subsequent year grant, provided that its traffic records coordinating committee continues to be in operation and continues to oversee implementation of the strategic plan. States receiving any grant funds are required to certify that the funds will be used only to adopt and implement an effective highway safety data and traffic records program, in accordance with 23 CFR 1335.10(b). A team of agency subject matter experts reviews all applications from the states and determines compliance with the grant criteria.

The following table indicates how the states are using the funds received.

FISCAL YEAR 2000 SECTION 411 STATE HIGHWAY SAFETY DATA IMPROVEMENT GRANTS

State	Grant amount	How state is using grant funds
Alabama	$173,600	Traffic Records Assessment, update strategic plan, implement statewide electronic submission of traffic citations.
Alaska	173,600	Implement strategic traffic records plan develop an upgraded crash report, develop health system and crash data linkages and improve traffic records database interface.

FISCAL YEAR 2000 SECTION 411 STATE HIGHWAY SAFETY DATA IMPROVEMENT GRANTS—Continued

State	Grant amount	How state is using grant funds
Arizona	173,600	Develop a simplified and timely system for data users to retrieve crash data from traffic data systems and improve the compatibility between the two systems, research the development of a statewide citation tracking system, and support and/or provide access to technology to local police agencies that will improve electronic transfer of traffic data and increase on site data gathering.
Arkansas	173,600	Improve timeliness and efficiency of the data entry process for crash reports.
California	173,600	Implemented Department of Motor Vehicles (DMV) Automation of Rural Courts Project that provided automation hardware and software technology to input, send and retrieve traffic conviction and other data electronically, develop a laptop computer system for completing crash reports at crash sites to facilitate the direct entry of data into the crash file, and equip and train Highway Patrol with evidential quality pre-arrest breath testing devices to improve upon the alcohol detection at crash sites and in traffic stops.
Colorado	173,600	Complete a software upgrades for remote data entry of crash report data, and initiating development of probability matching of crash data and hospital data.
Connecticut	173,600	Complete a Traffic Records Assessment, update the Traffic Records Strategic Plan, complete an automated crash report form and report analysis package for use by State and local police departments, purchase new software to store the State crash file, develop an electronic ticketing system, complete development of GIS mapping capability, continue development of a data warehouse, and to improve user accessibility to Crash Outcome Date Evaluation System (CODES).
Delaware	173,600	Create an Emergency Medical System (EMS) data network, develop an automated Crash Reporting System, and create a GIS Crash Database.
Florida	173,600	Implement regional data centers, revise crash report instruction manual, crash report training.
Georgia	173,600	Automate crash reporting system, survey & software.
Hawaii	173,600	Develop file linkage, training for local police departments in crash reporting and alcohol screening devices, and develop electronic data transfer system.
Idaho	96,480	Develop a strategic traffic records plan.
Illinois	96,480	Develop a traffic records strategic improvement plan.
Indiana	173,600	Hire committee coordinator, improve crash data access, pilot test new crash location system.
Iowa	173,600	Capture of crash reports electronically, review crash report data, technology transfer, emergency response information and mapping.
Kentucky	173,600	Crash Project Phase IV—Develop, purchase Scanners.
Louisiana	173,600	Implement data entry, electronic data transfer, networking, and document imaging for crash reports and traffic records in State, parish, and local communities.

FISCAL YEAR 2000 SECTION 411 STATE HIGHWAY SAFETY DATA IMPROVEMENT GRANTS—Continued

State	Grant amount	How state is using grant funds
Maine	173,600	Pilot test an automated crash report form, provide training to state and local police, develop a new crash reporting data base with GIS capabilities capable of receiving crash reports electronically, coordinate Strategic Planning among state agencies, and design a statewide system architecture for integrated traffic records files.
Maryland	173,600	Support a Data Analysis Evaluation Coordinator, improve state crash form, expand scope and use of GIS, and implement statewide training.
Massachusetts	173,600	Update the traffic records assessment and the traffic records strategic plan. Activity continues to improve the quality of CODES data files and to update the state crash report form to comply with MMUCC (Model Minimum Uniform Crash Criteria).
Michigan	173,600	Develop an internet access query system.
Minnesota	173,600	Link two commercial vehicle crash systems, revise crash report form, improve data collection.
Mississippi	173,600	Software/Hardware for crash & citation data collection, data linkage for state CODES study, revision of crash report.
Missouri	173,600	STARS (Statewide Traffic Accident Reporting System) Data Base, conduct annual conference & workshop, Data Base Evaluation and Consultation.
Nebraska	173,600	Crash file linkage, revise report for electronic transfer, update existing traffic records files.
Nevada	173,600	Form an interagency subcommittee of the Traffic Records Committee to develop a 2001 legislative proposal to gain support and funding to implement an updated traffic records system, implement Traffic Accident System Planning and Design Project, and to promote a statewide traffic records conference.
New Hampshire	173,600	Purchase notebook PCs to complete crash reports in the field, revise crash report form to be in compliance with MMUCC, and to develop crash reporting software which can electronically capture driver license/vehicle registration data and Global Positioning System (GPS) location data.
New York	173,600	Accident information system upgrade. This project would allow direct electronic transfer of crash information from investigation agency to the state DMV file. Another project is scheduled to upgrade the ticket file. This upgrade would establish a ticket file electronically on a client server data base and would allow the courts to data-enter ticket disposition information electronically to a data base.
North Carolina	173,600	Development of a new crash reporting form, pilot test for electronic citation in one State Patrol District, and development of system to retrieve data via Internet.
North Dakota	96,480	Development of traffic records strategic plan.
Ohio	173,600	Complete interactive Internet web site, capture and image a redesign crash report form.
Oklahoma	173,600	Update traffic records strategic plan, address customer/client access to data bases.
Oregon	173,600	Linking health and crash data, DOT crash data retrieval and analysis, crash location upgrade and a Division of Motor Vehicles driver and vehicle files upgrade.
Pennsylvania	173,600	Conduct a series of regional traffic records symposiums to help determine and refine the information needs of the users/customers.

FISCAL YEAR 2000 SECTION 411 STATE HIGHWAY SAFETY DATA IMPROVEMENT GRANTS—Continued

State	Grant amount	How state is using grant funds
Rhode Island	173,600	Complete successful electronic transfer of crash reports from state and local police agencies to a central repository at DOT. All 39 cities and towns will be on line by September, 2000. State crash file will have capability to reference intersection locations and GIS mapping. Mobile data capture and transfer capability from police cruiser laptops will also exist. ''Canned'' and ad hoc report capability will be available from state crash file. RI will be the first state in the nation with 100 percent of all police agencies participating in electronic transfer of crash data to a central repository.
South Carolina	173,600	Design/implement an upgraded statewide traffic records system with linked citation and crash data.
Tennessee	173,600	Improve state crash reporting equipment, establish data collection in local law enforcement.
Vermont	173,600	Redesign the uniform crash report to be in compliance with MMUCC, develop software for a new crash data storage system which can interface with law enforcement telecommunications systems, pilot test electronic capture of EMS run data, develop software for electronic transfer of data to a central repository at the Department of Transportation, and to provide for Traffic Records System program management capabilities.
Virginia	173,600	Support statewide coordination, perform equipment and inventory assessments, develop communication standards, and develop a training package.
Washington	173,600	Upgrade emergency Medical Services trauma registry, develop a collision reporting system with Wisconsin DOT, a traffic records awareness campaign and a collision analysis reporting system with the Washington State Patrol.
West Virginia	96,480	Support statewide coordination and strategic planning development.
Wisconsin	96,480	Develop a traffic records strategic improvement plan.
Puerto Rico	173,600	Contract data processing of Police Accident Report form, pilot test pen based system to improve data collection and the use of Global Positioning System to improve data related to location of crashes.
American Samoa	173,600	Develop a 24/7 network link, obtain computer workstation for police dispatch and e substations, and develop pen based citation system and citation form.
Guam	173,600	Obtain manpower to input crash data, develop pilot project for a pen based citation entry system, and purchase computer system for Traffic Engineering Section.
Northern Marianas	173,600	Improve driver file system by eliminating double typing of license data and exploring adding a bar code/magnetic strip to driver licenses, provide computers and software for EMS database and connect the driver and EMS files to their main crash reporting system.
Total	7,600,000	

Question. How are you overseeing the use of those funds by the states? What technical assistance is NHTSA providing to the states?

Answer. States applying for Highway Safety Data Systems and Traffic Records grants must certify that the funds will be used only to adopt and implement an effective highway safety data and traffic records program. After grant award, a state must document for NHTSA how it plans to use these funds, as part of the its comprehensive Highway Safety Plan. Then, NHTSA's regional staff work with the states

on a regular basis to provide oversight and technical assistance in implementation of the states' highway safety plan. Also, prior to receipt of a subsequent data grant, a state must document progress made in improving highway safety data systems and traffic records since the previous submission of a grant application, specifically including an accounting of how previous grant funds were used. NHTSA's technical assistance efforts include offering the services of regional data analysis contractors. In addition, at a state's request, NHTSA facilitates the conduct of an independent assessment of a state's traffic records system by experts from across the nation.

HIGHWAY TRAFFIC SAFETY GRANT ADMINISTRATION

Question. Please break out how the administrative takedown funds were used for each of the grant programs for fiscal year 1999 and fiscal year 2000.

Answer. The following table represents how the administrative draw down funds were used in fiscal year 1999 and fiscal year 2000:

GRANT ADMINISTRATION

[In thousands of dollars]

	Fiscal year 1999 actuals	Fiscal year 2000 enacted
Salaries and Benefits	6,736	7,500
Travel	334	336
Operating Expenses	506	815
Contract Program	1,562	1,689
Total	9,138	10,340

Question. How do you propose to use the takedown funds for your grant programs in fiscal year 2001?

Answer. The following is NHTSA's proposed used of the draw down from the grant programs in fiscal year 2001:

Fiscal year 2001 grant administration

[In thousands of dollars]

Salaries and Benefits	8,207
Travel	421
Operating Expenses	815
Contract Program	555
Total	9,998

CONTRACTS MANAGED OR OVERSEEN BY STATE AND COMMUNITY SERVICES

Question. Please list the amount, nature, and benefits obtained from each contract managed or overseen by regional operations during fiscal year 1999 and thus far during fiscal year 2000.

Answer. The following table lists the amount, nature, and benefits obtained from each contract managed or overseen by the Office of State and Community Services (formerly the Office of Regional Operations) during fiscal year 1999 and thus far during fiscal year 2000.

CONTRACTS MANAGED OR OVERSEEN BY STATE AND COMMUNITY SERVICES DURING FISCAL YEAR 1999 & 2000

Nature	Contract amount		Benefits
	Fiscal year 1999 funds	Fiscal year 2000 funds	
Data Analysis and Evaluation Support—NHTSA Region I	$49,006	$50,000	These contracts provide the services of statisticians and data analysis experts who assist the states in setting goals and performance measures, designing and analyzing the results of seat belt observational surveys, implementing Crash Outcome Data Evaluation Systems, evaluating key projects, updating strategic plans for traffic records and data systems improvements and in carrying out other analytic services appropriate to the states' highway traffic safety missions.
Data Analysis and Evaluation Support—NHTSA Region II	(1)	0	
Data Analysis and Evaluation Support—NHTSA Region III	50,038	(1)	
Data Analysis and Evaluation Support—NHTSA Region IV	50,000	(2)	
Data Analysis and Evaluation Support—NHTSA Region V	(1)	(2)	
Data Analysis and Evaluation Support—NHTSA Region VI	50,000	(2)	
Data Analysis and Evaluation Support—NHTSA Region VII	(1)	(2)	
Data Analysis and Evaluation Support—NHTSA Region VIII	47,436	(2)	
Data Analysis and Evaluation Support—NHTSA Region IX & X	90,100	90,048	
Law Enforcement Liaison—Region III	56,000	(2)	A key component of both the Presidential Initiative for Increasing Seat Belt Use Nationwide and the DOT initiative to reduce alcohol-related deaths and injuries is high visibility law enforcement. The Regional Law Enforcement Liaisons provide comprehensive technical assistance to state, county, and local law enforcement agencies within the Region. The Liaisons market and coordinate law enforcement activities for these efforts.
Law Enforcement Liaison—Region V	27,500	(2)	
Law Enforcement Liaison—Region VI	0	(2)	
Law Enforcement Liaison—Region VII	0	75,000	
Law Enforcement Liaison—Region VIII	63,540	65,220	
Law Enforcement Liaison—Region IX	33,050	(2)	
Law Enforcement Liaison—Region X	0	72,952	
		75,740	
Traffic Safety Digest	85,000	(2)	The Traffic Safety Digest is a publication that highlights successful traffic safety programs that are being implemented around the country. It is distributed to over 3,000 traffic safety advocates on a quarterly basis. The Traffic Safety Digest allows traffic safety advocates to become aware of projects that are taking place nationwide and presents them with ideas that can be replicated.
Region I Internship Co-op with Boston University	121,000	(2)	This internship allows minority students the opportunity to study and gain hands-on experience in the field of traffic safety and other related areas.
Region IV Internship Co-op with Clark Atlanta University	21,000	(2)	
Region V Internship Co-op with Chicago State University	21,000	(2)	

Media Support Contract—Region I	35,000	35,000	The purpose of the media support contract is to provide services for the Regional Offices and their states to promote the goals of the Buckle Up America Campaign, You Drink and Drive. You Lose. Campaign, and highway safety educational programs in general. Through the technical assistance of experienced media consultants, NHTSA's critical highway safety messages can be effectively communicated to the public and policy makers.
Media Support Contract—Region II	35,000	33,325	
Media Support Contract—Region III	35,000	33,740	
Media Support Contract—Region IV	35,000	35,000	
Media Support Contract—Region V	(1)	(2)	
Media Support Contract—Region VI	35,000	34,000	
Media Support Contract—Region VII	35,000	29,127	
Media Support Contract—Region VIII	35,000	35,000	
Media Support Contract—Region IX	60,000	32,000	
Media Support Contract—Region X	35,000	0	
Highway Safety Training Services	1,555,000	787,647	The contract provides for a comprehensive package of highway safety training services from the Transportation Safety Institute. The training curricula is developed to assist the highway safety community in all aspects of highway safety program administration and implementation.
Computer Support Services	25,000	80,000	The contract provides the ten NHTSA regional offices with onsite computer service for both hardware and software on an ''as needed'' basis.
Injury Control Cooperative Agreement—Region I	35,000	(2)	NHTSA's Regional Offices are using injury control cooperative agreements to promote collaboration among State Highway Safety Offices, medical and public health professionals (including HMO's and health plan associations), law enforcement, insurance, business groups and non-traditional partners in an effort to promote traffic safety initiatives. Injury control contractorsare helping to expand Safe and Livable Communities and promote Buckle Up America and the agency's impaireddriving prevention programs.
Injury Control Cooperative Agreement—Region II	35,000	(2)	
Injury Control Cooperative Agreement—Region III	35,000	0	
Injury Control Cooperative Agreement—Region IV	35,000	(2)	
Injury Control Cooperative Agreement—Region V	30,000	(2)	
Injury Control Cooperative Agreement—Region VII	5,000	(2)	
Injury Control Cooperative Agreement—Region VIII	35,000	(2)	
Injury Control Cooperative Agreement—Region IX	35,000	(3)	
Injury Control Cooperative Agreement—Region X	35,000	(2)	
	35,000	35,000	

CONTRACTS MANAGED OR OVERSEEN BY STATE AND COMMUNITY SERVICES DURING FISCAL YEAR 1999 & 2000—Continued

Nature	Contract amount		Benefits
	Fiscal year 1999 funds	Fiscal year 2000 funds	
REGION I:			
S. 157 Innovative Program to Increase Seat Belt Use—Maine	([4])	354,200	These grants fund innovative statewide efforts to boost seat belt use rate and improve child passenger protection. Grants were awarded to states based on competitive proposals. Each proposal included a plan for periodic or sustained intensified enforcement of the state's seat belt and child passenger protection laws, coupled with high visibility media events and expanded partnerships.
S. 157 Innovative Program to Increase Seat Belt Use—Massachusetts		346,000	
S. 157 Innovative Program to Increase Seat Belt Use—New Hampshire		153,134	
S. 157 Innovative Program to Increase Seat Belt Use—Rhode Island		450,000	
S. 157 Innovative Program to Increase Seat Belt Use—Vermont		518,400	
REGION II:			
S. 157 Innovative Program to Increase Seat Belt Use—New Jersey		685,620	
S. 157 Innovative Program to Increase Seat Belt Use—New York		1,215,974	
REGION III:			
S. 157 Innovative Program to Increase Seat Belt Use—Puerto Rico		360,000	
S. 157 Innovative Program to Increase Seat Belt Use—Delaware		121,500	
S. 157 Innovative Program to Increase Seat Belt Use—District of Columbia		271,302	
S. 157 Innovative Program to Increase Seat Belt Use—Pennsylvania		376,461	
S. 157 Innovative Program to Increase Seat Belt Use—Virginia		820,000	
S. 157 Innovative Program to Increase Seat Belt Use—West Virginia		229,500	
REGION IV:			
S. 157 Innovative Program to Increase Seat Belt Use—Alabama		810,405	
S. 157 Innovative Program to Increase Seat Belt Use—Florida		1,353,000	
S. 157 Innovative Program to Increase Seat Belt Use—Georgia		1,000,128	
S. 157 Innovative Program to Increase Seat Belt Use—Kentucky		569,300	
S. 157 Innovative Program to Increase Seat Belt Use—Mississippi		499,432	
S. 157 Innovative Program to Increase Seat Belt Use—North Carolina		800,000	
S. 157 Innovative Program to Increase Seat Belt Use—South Carolina		884,286	
REGION V:			
S. 157 Innovative Program to Increase Seat Belt Use—Tennessee		864,500	
S. 157 Innovative Program to Increase Seat Belt Use—Illinois		546,640	

S. 157 Innovative Program to Increase Seat Belt Use—Indiana			669,800
S. 157 Innovative Program to Increase Seat Belt Use—Michigan			1,042,277
S. 157 Innovative Program to Increase Seat Belt Use—Minnesota			365,200
S. 157 Innovative Program to Increase Seat Belt Use—Wisconsin			884,984
REGION VI:			
S. 157 Innovative Program to Increase Seat Belt Use—Arkansas			237,000
S. 157 Innovative Program to Increase Seat Belt Use—Louisiana			775,000
S. 157 Innovative Program to Increase Seat Belt Use—New Mexico			316,000
S. 157 Innovative Program to Increase Seat Belt Use—Texas			1,557,608
REGION VII:			
S. 157 Innovative Program to Increase Seat Belt Use—Iowa			230,000
S. 157 Innovative Program to Increase Seat Belt Use—Kansas			200,000
S. 157 Innovative Program to Increase Seat Belt Use—Missouri			535,450
S. 157 Innovative Program to Increase Seat Belt Use—Nebraska			436,680
REGION VIII:			
S. 157 Innovative Program to Increase Seat Belt Use—Colorado			727,000
S. 157 Innovative Program to Increase Seat Belt Use—Montana			204,000
S. 157 Innovative Program to Increase Seat Belt Use—North Dakota			450,298
S. 157 Innovative Program to Increase Seat Belt Use—Utah			221,700
REGION IX:			
S. 157 Innovative Program to Increase Seat Belt Use—Arizona			490,900
S. 157 Innovative Program to Increase Seat Belt Use—Hawaii			228,418
S. 157 Innovative Program to Increase Seat Belt Use—Nevada			290,675
REGION X:			
S. 157 Innovative Program to Increase Seat Belt Use—Alaska			495,400
S. 157 Innovative Program to Increase Seat Belt Use—Idaho			500,000
S. 157 Innovative Program to Increase Seat Belt Use—Oregon			349,764
S. 157 Innovative Program to Increase Seat Belt Use—Washington			500,000

[1] Continued with prior year funds.
[2] TBD.
[3] No contractor.
[4] No funds expended in fiscal year 1999.

HIGHWAY TRAFFIC SAFETY GRANTS FUNDING

Question. How many states are receiving Section 410 grant funds from fiscal year 2000 appropriations? Please indicate how much funding was provided to each state and how each state spent the grant money. Please provide similar tables for the other NHTSA administered grant programs.

Answer. No state has received Section 410 Alcohol Incentive Grant funds from fiscal year 2000 appropriations yet. The applications for these funds are not due until August 1, 2000. Similarly, no fiscal year 2000 funds have been awarded yet under the Section 163 .08 BAC Law Incentive Grant program and the Section 405 Occupant Protection Incentive Grant program, since applications are due July 15 and August 1, respectively.

The NHTSA administered grant programs which have already awarded fiscal year 2000 grant funds are (1) the Section 402 State and Community Highway Safety formula grant program, (2) the Section 157 Seat Belt Use Incentive Grant program, (3) the Section 2003(b) Child Passenger Protection Education Grant program, and (4) the Section 411 State Highway Safety Data Improvement Grant program. The following four tables provide information on how much fiscal year 2000 funding was provided to each state and how each state is spending the grant money under each of these programs.

FISCAL YEAR 2000 SECTION 402 STATE AND COMMUNITY HIGHWAY SAFETY FORMULA GRANT FUNDING

State	Grant amount	How state is using grant funds
Alabama	$2,516,007	$184K Planning & Administration, $592K Alcohol programs, $425K Emergency Medical Services, $252K Occupant Protection, $146K Police Traffic Services, $912K Community Traffic Safety Project, $5K Railroad/Highway Crossings.
Alaska	725,800	$67K Planning & Administration, $132K Alcohol Programs, $9K Emergency Medical Services, $101K Occupant Protection, $52K Pedestrian Safety, $238K Police Traffic Services, $63K Traffic Records, $63K Safe Communities.
Arizona	2,030,069	$203K Planning & Administration, $1,052K Alcohol programs, $90K Emergency Medical Services, $104K Occupant Protection, $14K Pedestrian Safety, $372K Police Traffic Services, $30K Traffic Records, $48K Alcohol programs, $2K School Bus Safety, $45K Safe Communities, $70K Roadway Safety.
Arkansas	1,818,023	$122K Planning & Administration, $644K Alcohol, $705K Occupant Protection, $30K Traffic Records, $101K Speed Control, $6K Rail/Hwy Crossings, $110K Safe Communities, $100K Roadway Safety.
California	13,888,151	$874K Planning & Administration, $134K Alcohol programs, $2,561K Emergency Medical Services, $1,117K Occupant Protection, $2,029K Pedestrian Safety, $4,311K Police Traffic Services, $397K Traffic Records, $1,623K Safe Communities, $842K Roadway Safety.
Colorado	2,125,636	$180K Planning & Administration, $388K Alcohol programs, $25K Motorcycle Safety, $524K Occupant Protection, $11K Pedestrian Safety, $413K Police Traffic Services, $315K Traffic Records, $119K Safe Communities, $150K Roadway Safety.
Connecticut	1,555,073	$155K Planning & Administration, $315K Alcohol Countermeasures, $175K Motorcycle Safety, $235K Occupant Protection, $535K Police Traffic Services, $90K Traffic Records, $50K Child Restraints.
Delaware	725,800	$179K Alcohol Programs, $63K Planning & Administration, $254K Occupant Protection, $38K Pedestrian Safety, $191K Police Traffic Services, $1K School Bus Safety.

FISCAL YEAR 2000 SECTION 402 STATE AND COMMUNITY HIGHWAY SAFETY FORMULA GRANT FUNDING—Continued

State	Grant amount	How state is using grant funds
DC	725,800	$244K Alcohol, $62K Planning & Administration, $197K Occupant Protection, $25K Pedestrian Safety, $136K Police Traffic Services, $62K Safe Communities.
Florida	6,418,232	$149K Planning & Administration, $1,761K Alcohol programs, $1,701K Occupant Protection, $654K Pedestrian Safety, $1,003K Police Traffic Services, $121K Traffic Records, $429K Community Traffic Safety Project, $600K Roadway Safety.
Georgia	3,704,007	$380K Planning & Administration, $355K Alcohol programs, $827K Occupant Protection, $150K Pedestrian Safety, $204K Traffic Records, $1,300K Community Traffic Safety Project, $128K Speed Control, $360K Safe Communities.
Hawaii	725,800	$29K Planning & Administration, $342K Alcohol programs, $38K Emergency Medical Services, $3K MC; $8K Occupant Protection, $2K Pedestrian Safety, $1K Police Traffic Services, $192K Speed Control, $111K Safe Communities.
Idaho	850,553	$40K Planning & Administration, $251K Alcohol Programs, $37K Emergency Medical Services, $160K Occupant Protection, $22K Pedestrian Safety, $163K Police Traffic Services, $121K Traffic Records, $12K Roadway Safety, $45K Paid Media.
Illinois	5,986,792	$235K Planning & Administration, $1,032K Occupant Protection, $1,021K Alcohol programs, $130K Emergency Medical Services, $90K Pedestrian Safety, $1,705K Police Traffic Services, $60K Traffic Records, $1,655K Community Traffic Safety Project, $60K Roadway Safety.
Indiana	3,136,224	$250K Planning & Administration, $1,029K Occupant Protection, $1,083K Alcohol programs, $392K Police Traffic Services, $275K Traffic Records, $107K Community Traffic Safety Project.
Iowa	2,151,493	$125K Planning & Administration, $666K Alcohol Programs, $10K Emergency Medical Services, $700K Occupant Protection, $25K Pedestrian Safety, $599K Police Traffic Services, $26K Safe Communities.
Kansas	2,211,418	$142K Planning & Administration, $35K Emergency Medical Services, $160K Motorcycle Safety, $502K Occupant Protection, $542K Police Traffic Services, $11K Traffic Records, $150K Speed Enforcement, $187K Safe Communities,$482K Alcohol programs.
Kentucky	2,186,582	$91K Planning & Administration, $540K Alcohol Programs, $429K Occupant Protection, $63K Pedestrian Safety, $799K Police Traffic Services, $99K Community Traffic Safety Project, $125K Driver Licensing, $40K Roadway Safety.
Louisiana	2,296,547	$166K Planning & Administration, $402K Alcohol, $74K EMS, $299K Occupant Protection, $865K Police Traffic Services, $269 Traffic Records, $179K Safe Communities, $43K Roadway Safety.
Maine	725,800	$73K Planning & Administration, $65K Alcohol Countermeasures, $45K Emergency Medical Services, $58K Police Traffic Services, $180K Traffic Records, $104K Driver Education, $21K School Bus Safety, $80K Child Restraints, $100K Safe Communities.

FISCAL YEAR 2000 SECTION 402 STATE AND COMMUNITY HIGHWAY SAFETY FORMULA GRANT FUNDING—Continued

State	Grant amount	How state is using grant funds
Maryland	2,262,382	$110K Alcohol, $58K Planning & Administration, $137K Emergency Medical Services, $301K Occupant Protection, $8K Pedestrian Safety, $36K Police Traffic Services, $1,233K Comprehensive Traffic Safety, $336K Safe Communities, $44K Roadway Safety
Massachusetts	2,822,652	$250K Planning & Administration, $236K Alcohol Countermeasures, $23K Emergency Medical Services, $72K Motorcycle Safety, $285K Occupant Protection, $189K Pedestrian Safety, $765K Police Traffic Services, $335K Traffic Records, $648K Community Traffic Safety Project, $19K School Bus Safety.
Michigan	4,950,255	$413K Planning & Administration, $720K Occupant Protection, $1,283K Alcohol Programs, $25K Motorcycle Safety, $60K Pedestrian Safety, $779K Police Traffic Services, $127K Traffic Records, $1,202K Community Traffic Safety Project, $71K Driver Education, $14K Safe Communities, $256K Roadway Safety
Minnesota	2,980,708	$110K Planning & Administration, $766K Occupant Protection, $374K Alcohol Programs, $1,101K Police Traffic Services, $120K Traffic Records, $510K Community Traffic Safety Project.
Mississippi	1,719,141	$172K Planning & Administration, $209K Alcohol programs, $292K Occupant Protection, $419K Police Traffic Services, $112K Traffic Records, $118K Community Traffic Safety Project, $142K Youth Alcohol programs, $172K Safe Communities, $83K Roadway Safety.
Missouri	3,217,266	$140K Planning & Administration, $1,279K Police Traffic Services, $485K Alcohol programs, $408K Youth Alcohol programs, $214K Occupant Protection, $131K Traffic Records, $218K Safe Communities, $342K Roadway Safety.
Montana	948,242	$59K Planning & Administration, $190K Alcohol programs, $100K Emergency Medical Services, $1K Motorcycle Safety, $208K Occupant Protection, $51K Pedestrian Safety, $101K Police Traffic Services, $156K Traffic Records, $83K Safe Communities
Nebraska	1,474,640	$50K Planning & Administration, $277K Alcohol programs, $122K Occupant Protection, $75K Police Traffic Services, $20K Traffic Records, $75K Identification & Surveillance, $788K Speed Enforcement, $20K Speed Control, $48K Safe Communities.
Nevada	904,578	$90K Planning & Administration, $76K Alcohol programs, $59K Emergency Medical Services, $62K Occupant Protection, $27K Pedestrian Safety, $148K Police Traffic Services, $420K Community Traffic Safety Project, $23K Roadway Safety.
New Hampshire	725,800	$73K Planning & Administration, $146K Alcohol Countermeasures, $13K Emergency Medical Services, $108K Occupant Protection, $43K Pedestrian Safety, $93K Police Traffic Services, $36K Traffic Records, $36K Community Traffic Safety Project, $156K Speed Control, $11K Safe Communities, $11K Roadway Safety.

FISCAL YEAR 2000 SECTION 402 STATE AND COMMUNITY HIGHWAY SAFETY FORMULA GRANT FUNDING—Continued

State	Grant amount	How state is using grant funds
New Jersey	3,544,289	$338K Planning & Administration, $533K Alcohol programs, $307K Occupant Protection, $131K Pedestrian Safety, $1,059K Police Traffic Services, $238K Traffic Records, $449K Community Traffic Safety Project, $335K Roadway Safety, $154K Paid Advertising.
New Mexico	1,159,542	$40K Planning & Administration, $87K Alcohol, $80K Emergency Medical Services, $268K Occupant Protection, $39K Pedestrian, $195K Police Traffic Services, $250K Traffic Records, $200K Safe Communities.
New York	8,502,951	$560K, Planning & Administration, $400K Alcohol programs, $20K, Emergency Medical Services, $650K Occupant Protection, $360K Pedestrian Safety, $2,000K Police Traffic Services, $1,400K Traffic Records, $2,741K Community Traffic Safety Project, $300K Roadway Safety, $72K School Bus Safety.
North Carolina	3,635,203	$275K Alcohol programs, $87K Motorcycle Safety, $553K Occupant Protection, $292K Pedestrian Safety, $960K Police Traffic Services, $197K Traffic Records, $48K Railroad/Highway Crossings, $703K Safe Communities, $477K Roadway Safety, $43K Youth Alcohol programs.
North Dakota	1,028,261	$42K Planning & Administration, $89K Alcohol programs, $12K Emergency Medical Services, $12K Motorcycle Safety, $228K Occupant Protection, $172K Police Traffic Services, $156K Traffic Records, $317K Safe Communities.
Ohio	5,552,083	$120K Planning & Administration, $1,007 Alcohol Programs, $370K Occupant Protection, $1,395K Police Traffic Services, $75K Traffic Records, $500K Community Traffic Safety Project, $410K Speed Control, $1,600K Safe Communities, $75K Roadway Safety.
Oklahoma	2,303,115	$7K Planning & Administration, $725K Alcohol, $344K Occupant Protection, $5K Pedestrian Safety, $1,118K Police Traffic Services, $54K Traffic Records, $50K Roadway Safety.
Oregon	1,933,728	$193K Planning & Administration, $344K Alcohol Programs, $50K Emergency Medical Services, $195K Occupant Protection, $145K Pedestrian Safety, $65K Police Traffic Services, $591K Drivers Education, $50K Speed Control, $271K Safe Communities, $30K Roadway Safety.
Pennsylvania	6,011,050	$1,750K Alcohol, $1,350K Police Traffic Services, $280K Emergency Medical Services, $2,006K Occupant Protection, $175K Youth Alcohol, $200K Safe Communities, $250K Motorcycle Safety.
Rhode Island	725,800	$72K Planning & Administration, $348K Alcohol Countermeasures, $27K Emergency Medical Services, $13K Occupant Protection, $40K Pedestrian Safety, $25K Police Traffic Services, $10K Community Traffic Safety Project, $50K Safe Communities, $140K Paid Advertising.
South Carolina	2,026,802	$193K Planning & Administration, $24K Emergency Medical Services, $542K Occupant Protection, $789K Police Traffic Services, $288K Youth Alcohol programs, $190K Safe Communities.
South Dakota	1,024,112	Planning & Administration $31K, Alcohol programs $72K, Emergency Medical Services $191K, Occupant Protection $149K Police Traffic Services $542K, SB $2K, Roadway Safety $37K.

FISCAL YEAR 2000 SECTION 402 STATE AND COMMUNITY HIGHWAY SAFETY FORMULA GRANT FUNDING—Continued

State	Grant amount	How state is using grant funds
Tennessee	2,798,387	$250K Planning & Administration, $1,174K Alcohol programs, $1,374K Occupant Protection.
Texas	9,702,014	$41K Planning & Administration, $391K EMS, $394K Pedestrian Safety, $2,147K Police Traffic Services, $2,737K Traffic Records, $271K Drivers Education (Public Information/Education), $3,049K Speed Control, $3K Safe Communities, $669K Roadway Safety.
Utah	1,083,050	$89K Planning & Administration, $678K Community Traffic Safety Project, $35K Emergency Medical Services, $141K Occupant Protection, $48K Pedestrian Safety, $44K Police Traffic Services, $19K Traffic Records, $2K Youth Alcohol programs, $28K Roadway Safety.
Vermont	725,800	$63K Alcohol Countermeasures, $10K Emergency Medical Services, $80K Occupant Protection, $291K Police Traffic Services, $25K Traffic Records, $131K Community Traffic Safety Project, $126K Driver Education.
Virginia	3,198,873	$350K Alcohol programs, $300K Planning & Administration, $50K Emergency Medical Services, $70K Motorcycle Safety, $327K Occupant Protection, $78K Pedestrian Safety, $550K Police Traffic Services, $85K Traffic Records, $350K Community Traffic Safety, $549K Speed Control, $489K Roadway Safety.
Washington	2,737,952	$239K Planning & Administration, $357K Alcohol Programs, $6K Emergency Medical Services, $237K Occupant Protection, $321K Pedestrian Safety, $236K Police Traffic Services, $272K Traffic Records, $92K Drivers Education, $564K Safe Communities, $414K Roadway Safety.
West Virginia	1,064,072	$100K Alcohol programs, $100K Planning & Administration, $100K Emergency Medical Services, $100K Occupant Protection, $100K Traffic Records, $564K Safe Communities.
Wisconsin	3,027,355	$480K Alcohol Programs, $190K Emergency Medical Services, $160K Motorcycle Safety, $610 Occupant Protection, $261K Pedestrian Safety, $475K Police Traffic Services, $155K Traffic Records, $646K Community Traffic Safety Project, $50K Roadway Safety.
Wyoming	725,800	Planning & Administration $58K, Alcohol programs $143K, Emergency Medical Services $30K, Occupant Protection $81K, Pedestrian Safety $10K, Police Traffic Services $29K, Traffic Records $22K, Youth Alcohol programs $72K, Speed Enforcement $234K, Safe Communities $40K, Roadway Safety $7K.
Puerto Rico	1,599,990	$160K Planning & Administration, $382K Alcohol programs, $72K Emergency Medical Services, $64K Occupant Protection, $159K Pedestrian Safety, $279K Police Traffic Services, $55K Traffic Records, $63K Community Traffic Safety Project, $239K Youth Alcohol programs, $126K Roadway Safety.
BIA	1,088,700	$478K Alcohol, $60K Occupant Protection, $263K Police Traffic Services, $193K Safe Communities, $53K Roadway Safety, 41K Planning & Administration.
American Samoa	362,900	$36K Planning & Administration, $59K Alcohol programs, $26K Emergency Medical Services, $51K Occupant Protection, $27K Pedestrian Safety, $57K Police Traffic Services, $44K Traffic Records, $38K Youth Alcohol programs, $10K Safe Communities, $15K Roadway Safety.

FISCAL YEAR 2000 SECTION 402 STATE AND COMMUNITY HIGHWAY SAFETY FORMULA GRANT FUNDING—Continued

State	Grant amount	How state is using grant funds
Guam	362,900	$36K Planning & Administration, $107K Alcohol programs, $152K Emergency Medical Services, $30K Occupant Protection, $20K Youth Alcohol programs, $18K Safe Communities.
N. Marianas	362,900	$36K Planning & Administration, $160K Alcohol programs, $10K Emergency Medical Services, $10K Occupant Protection, $147K Police Traffic Services.
Virgin Islands	362,900	$36K Planning & Administration, $91K Alcohol programs, $70K Emergency Medical Services, $70K Occupant Protection, $20K Pedestrian Safety, $60K Police Traffic Services, $15K Traffic Records.
Total	145,160,000	

FISCAL YEAR 2000 SECTION 157 SEAT BELT USE INCENTIVE GRANTS

State	Total grant (estimated federal budget savings)	Allocation to highway safety programs (402)	Allocation to federal aid highway programs	How state is using grant funds
Alaska	$9,000	$9,000	$0	$8K Occupant Protection public information & training, $1K Police Traffic Services.
Arkansas	179,400	44,850	134,550	$45K Occupant Protection, Federal Aid Hwy Programs, $135K Railroad Signal.
California	15,705,300	15,705,300	0	$574K Alcohol programs, $1,597K TR, $92K Emergency Medical Services, $893K Pedestrian Safety, $9,810K Police Traffic Services, $214K Occupant Protection, $173K Roadway Safety, $2,352K Planning & Administration.
Colorado	854,500	854,500	0	$373K Alcohol programs, $122K Traffic Records, $29K Pedestrian Safety, $160K Police Traffic Services, $90K Occupant Protection, $14K Safe Communities, $16K Roadway Safety, $50K Paid Advertising.
Connecticut	1,613,400	1,613,400	0	$1,500K Police Traffic Services, $113K Alcohol Countermeasures.
Delaware	6,900	6,900	0	6.9K Occupant Protection.
DC	417,900	417,900	0	$380K Police Traffic Services, $38K Traffic Records.
Georgia	3,014,200	2,214,200	800,000	$514K Driver Education, $1,100K Community Traffic Safety Project, Traffic Records $400K, $100K Occupant Protection, $100K Pedestrian Safety, Federal-Aid: $800K Traffic Management System.
Hawaii	375,400	375,400	0	$70K Alcohol programs, $166K Motorcycle Safety, $89K Occupant Protection, $50K Safe Communities.
Idaho	218,300	218,300	0	$200K on enhanced enforcement, $18K on public information for occupant protection.
Illinois	1,007,300	1,007,300	0	$1,007K Occupant Protection.
Indiana	1,755,300	1,755,300	0	$1,755K Occupant Protection.
Iowa	837,800	527,800	310,000	$528K Police Traffic Services, Federal Aid: $90K Roadway Safety, $110K Enforcement Efforts Red Light Running & Work Zone Safety, $110K School Zone Strong Yellow & Green Program.
Kansas	266,900	266,900	0	$267K Police Traffic Services.
Louisiana	284,100	284,100	0	$84K Police Traffic Services, $200K Occupant Protection.
Maine	11,000	11,000	0	$11K Occupant Protection

FISCAL YEAR 2000 SECTION 157 SEAT BELT USE INCENTIVE GRANTS—Continued

State	Total grant (estimated federal budget savings)	Allocation to highway safety programs (402)	Allocation to federal aid highway programs	How state is using grant funds
Maryland	2,950,800	2,950,800	0	$101K Community Traffic Safety Programs, $50K Emergency Medical Services, $950K Pedestrian Safety, $650K Police Traffic Services, $200K Paid Advertising—Aggressive Driving, $1,000K Occupant Protection.
Michigan	1,075,700	718,000	357,700	$718K Occupant Protection, Federal Aid: $357K for-raised payment markings at hazard locations.
Mississippi	1,051,000	800,000	251,000	$300K Traffic Records, $200K Police Traffic Services, $100K Occupant Protection, $200K Safe Communities, Federal Aid Highway Program: $251K PI&E Campaign.
Montana	131,600	131,600	0	$131K Occupant Protection.
Nebraska	39,600	19,800	19,800	$19.8K Occupant Protection, Federal Aid: $19.8K Work Zone Safety PI&E effort.
Nevada	687,000	687,000	0	$568K Community Traffic Safety Project, $30K Occupant Protection, $55K Pedestrian Safety, $34K Police Traffic Services.
New Jersey	913,100	913,100	0	$913K Speed Control.
New Mexico	900,200	900,200	0	$233K Traffic Records, $176K Police Traffic Services, $389 Occupant Protection, $92K Safe Communities, $5K Roadway Safety, $5K Planning & Administration.
New York	3,920,700	3,520,700	400,000	$3,520K Occupant Protection for ''Buckle Up NY'', Federal-Aid: $400K commercial vehicle oversight efforts.
North Carolina	3,239,500	3,239,500	0	$606K Alcohol programs, $785K Traffic Records, $480K Emergency Medical Services, $1,368K Occupant Protection.
Oregon	1,538,400	1,463,400	75,000	$491K Drivers Education, $30K Alcohol Programs, $91K Pedestrian Safety, $340K Occupant Protection, $165K Speed Control, $206K Safe Communities, $140K Roadway Safety. Federal Aid Program: $75K Allocation to the Rail Safety Program, installation of Pedestrian safety barriers.
Pennsylvania	964,500	964,500	0	$400K local & municipal occupant protection enforcement, $200K State Police—occupant protection enforcement, $300K paid advertising—alcohol & belts, $64.5K evaluation of paid advertising.
South Carolina	477,300	337,300	140,000	$267K Alcohol programs, $70K Occupant Protection, Federal-aid: $140K Occupant Protection—
Texas	5,325,700	1,775,234	3,550,466	$1,775K School Bus Safety (Commercial Vehicle Safety), Federal Aid Hwy Programs: $1,775K Railroad Signal, $1,775K Hazard Elimination.
Utah	221,700	221,700	0	$222K Occupant Protection.
Virginia	1,258,200	1,258,200	0	$1,258K Occupant Protection.
Washington	2,433,900	446,000	1,987,900	$446K occupant protection enforcement and public information through Safe Communities Program. Federal Aid Program: $1,988K allocated to Corridor Projects for Washington State DOT.
Wisconsin	549,900	549,900	0	$205K in Occupant Protection, $200K Grad Licensing, $95K Safe Communities, $50K Work Zone Safety.
Puerto Rico	375,200	375,200	0	$295K Enforcement, (vehicles, overtime, saturation patrols, training), $80K PI&E (mass media and print material) and training (store clerks, mechanics, loaner programs, nurses pediatricians, etc.).
Total	54,610,700	46,584,284	8,026,416	

FISCAL YEAR 2000 SECTION 2003B CHILD PASSENGER PROTECTION EDUCATION GRANTS

State	Grant amount	How state is using grant funds
Alabama	$135,237	Education and outreach activities to reach rural and African American populations, establish fitting stations, train new child passenger safety (CPS) technicians.
Alaska	37,500	Multi-cultural and multi-lingual messages to reach Alaskan Natives, Spanish-, Korean-, and Tagalog-speaking Alaskans, materials for children with special transportation needs, car seat clinics, establish at least one fitting station, conduct NHTSA standardized CPS training course.
Arizona	109,097	Pilot a Judicial Program in Phoenix courts to educate violators about child passenger safety, certify technicians and instructors, diverse populations to be targeted are African American, Hispanic and Native Americans.
Arkansas	97,748	Use pediatric health care professionals and child-care professionals to deliver CPS information to low socioeconomic and Hispanic speaking populations, conduct CPS training sessions, distribute new TV public service announcements (PSA's).
California	746,132	Develop educational programs which are culturally sensitive, diverse populations to be targeted are African American, Hispanic, Native American, Chinese, Japanese, Vietnamese, Hmong, Korean, Arabic, and East Indian (India), train instructors, technicians and specialist.
Colorado	114,260	Brief CPS educators, professionals and law enforcement on new tether requirement and increased use of booster seats, targeted families and care givers in low income and rural communities, conduct CPS courses using NHTSA curricula.
Connecticut	83,547	Educate low usage populations and non-English speaking communities, train social workers, special needs providers, workshop on transporting children with special needs, CPS technician training, child safety inspection clinics, statewide central clearing house.
Delaware	37,500	Public information campaign to increase booster seat use, CPS training, child safety seat check up events, loaner program.
DC	37,500	Increase the number of fitting stations, conduct NHTSA Standardized CPS courses, workshops and training on installation of special needs seats.
Florida	344,855	Focus education and outreach efforts in African American, Hispanic and other diverse populations, establish state diversity coalition and statewide occupant protection resource center, increase booster seat use, training workshops for Head Start employees, establish fitting stations, conduct child safety seat clinics.
Georgia	199,066	Mini-grants to community organizations to promote child safety seat use among low income, rural and minority populations (African American and Hispanic), promote booster seat use, child safety seat/booster seat clinics, recruit African American and Hispanics as certified CPS technicians and instructors.
Hawaii	37,500	CPS clinics and fitting stations, conduct CPS training classes, diverse populations to be targeted for education and outreach are Pacific Islanders, Philippine, Chinese and Japanese.
Idaho	45,735	Conduct NHTSA Standardized CPS courses, child safety seat clinics, work with EMS to establish permanent rural child safety seat fitting stations.
Illinois	321,705	Conduct CPS training courses, purchase three checkpoint trailers, establish two child passenger resource centers/fitting stations (one rural, one urban), establish a toll-free number for CPS information, statewide booster seat campaign, target education and outreach to African American, Hispanic, Asian and low-income populations.
Indiana	168,549	Continue statewide CPS training, purchase convertible seats for minority and low-income families, expand fitting station project.

FISCAL YEAR 2000 SECTION 2003B CHILD PASSENGER PROTECTION EDUCATION GRANTS—Continued

State	Grant amount	How state is using grant funds
Iowa	115,678	Develop PSA's on misuse of child safety seats and booster seats, establish fitting stations, conduct checkup events, CPS training.
Kansas	118,918	Conduct NHTSA Standardized CPS course, develop statewide newsletter, Bilingual (English and Spanish) brochure, billboards, television and radio PSA's, develop CPS Checkup Event ''How TO'' packages, hold check-up events.
Kentucky	117,521	Employ a full time CPS specialist, establish statewide CPS committee, conduct child safety seat clinics, CPS training.
Louisiana	123,414	Train CPS advocates using the NHTSA Standardized CPS course, serve ethnic and low socioeconomic groups, develop printed materials, conduct CPS clinics.
Maine	38,260	Target misuse and lack of child restraint use in rural and low-income areas, fund state CPS coordinator, CPS training, fitting stations, establish state clearinghouse for CPS public information.
Maryland	121,547	Fitting stations, including mobile fitting stations, conference on transporting children with special needs, CPS training.
Massachusetts	151,645	Targeting high risk populations with materials, PSA's and educational program, increase community checkpoints and fitting stations, conduct CPS training.
Michigan	266,013	NHTSA Standardized CPS course, convert loaner programs into permanent fitting stations, hire state coordinator. Target education and outreach to African American, Latino/Hispanic, and Arab/Chadian populations.
Minnesota	160,236	Purchase six trailers for CPS training and as mobile fitting stations supplied with child safety seats, printed materials and training equipment, develop public information materials in Hispanic and among and for lower reading levels, provide mini-grants for community training, clinics, and fitting stations, purchase child safety seats.
Mississippi	92,414	CPS messages to low-income and African Americans families, PSA's for radio, television and print, billboards, conduct child safety seat checkpoints, establish fitting stations, conduct CPS training.
Missouri	172,933	Develop statewide public education program, including Child Restraint Resource Guides, establish fitting stations targeting minority and low-income families, conduct CPS training classes.
Montana	51,004	Recruit fire departments to serve as fitting stations, CPS training for health professionals, law enforcement and child care providers, training, education and outreach targeted to Native American populations.
Nebraska	79,302	Conduct CPS training, conduct child safety seat checkpoints and seat distributions, activities targeted to African American, Hispanic and Native American populations.
Nevada	48,634	CPS brochures to medical providers, develop CPS educational videos, train CPS technicians and instructors, conduct checkpoints, education and outreach targeted to African American, Hispanic and Native American.
New Hampshire	37,500	Update child restraint law poster, brochure on correct child seat usage and the new child restraint law, pilot CPS program/seat distribution in low-income housing centers, conduct CPS training, increase number of checkpoints.
New Mexico	62,343	Target CPS messages to older children (between the ages of 11 and 16), use peer education model with students, targeting low income and/or minority schools districts (Hispanic, Native American).
New York	456,826	Create information booklets and cards, posters and billboards targeting low-income and minority populations, conduct CPS clinics and checkpoints, establish fitting stations, conduct CPS training.

FISCAL YEAR 2000 SECTION 2003B CHILD PASSENGER PROTECTION EDUCATION GRANTS—Continued

State	Grant amount	How state is using grant funds
North Carolina	195,356	Target outreach to rural mountain communities, Hispanic and low-income communities, conduct child safety seat clinics and checkpoints, distribute child safety seats and seats for special-needs children, translate CPS brochures into Spanish, conduct CPS training, launch pilot fitting station program with fire departments.
North Dakota	55,319	CPS education, outreach and child safety seat distribution program for Native American tribes, develop billboards, pamphlets and posters, conduct CPS training for new technicians, instructors, and for care givers.
Ohio	298,333	Expand the NHTSA Standardized CPS course, expand number of fitting stations, emphasize booster seats, purchase child safety seats and booster seats for distribution to low-income and minority (African American and Hispanic) communities, establish toll-free number for CPS information.
Oklahoma	123,821	Child safety seats and booster seats distribution program, establish fitting stations at ambulance facilities across the state, provide seats to low-income families, conduct CPS training.
Oregon	103,952	Establish state child safety seat resource center, target education and outreach to rural, low-income areas, establish toll-free number for CPS information, train CPS technicians and instructors.
Pennsylvania	322,988	Establish fitting stations, target education and outreach to minority populations, expand child safety seat loaner programs in minority communities, conduct CPS training.
Rhode Island	37,500	Conduct bilingual (English and Spanish) CPS campaign including new brochures, billboard designs, and PSA's, conduct enforcement checkpoints, child safety seat clinics, and community safety day events in low-income or minority communities, conduct CPS training courses, recruit bilingual CPS professionals.
South Carolina	108,930	Improve child restraint use among children living in foster care, conduct CPS training for foster parents and foster care association employees/volunteers, distribute child safety seats and booster seats, conduct enforcement checkpoints.
Tennessee	150,397	Target African American families and counties with low use rates, conduct child safety seat clinics, seat distribution program (including seats for special needs children), establish mobile fitting stations, conduct CPS training.
Texas	521,422	Produce new Spanish and English language materials, purchase additional child safety seats for loaner programs and safety seat inspections, conduct CPS training, develop Spanish language CPS course, conduct CPS clinics, distribute CPS materials through Safe Communities.
Utah	58,215	Target education, training and outreach to Native Americans populations, especially the Navajo Nation, train law enforcement officers from the reservations, provide training on seat installation for children with special needs, conduct CPS training for new technicians and instructors, provide tether update training, conduct enforcement checkpoints.
Vermont	37,500	Distribute child safety seats to low income families, establish fitting stations, train CPS instructors and technician.
Virginia	171,890	Establish mobile fitting stations in minority populations and documented low usage areas, train CPS professionals.
Washington	147,143	Conduct child safety seat clinics targeting low-income, rural and part-time restraint users, and Native American and Hispanic families, establish local CPS teams. Train CPS technicians and instructors.

FISCAL YEAR 2000 SECTION 2003B CHILD PASSENGER PROTECTION EDUCATION GRANTS—Continued

State	Grant amount	How state is using grant funds
West Virginia	57,190	Target education and outreach activities to low-come communities, provide child safety seats to current loaner programs, conduct NHTSA Standardized CPS courses.
Wisconsin	162,721	Target education and outreach activities to minority populations (Native Americans, African Americans, Hispanics, and Hmong), conduct statewide CPS conference, establish fitting stations, purchase CPS trailer for training, checkpoints and to use as a mobile fitting station.
Am. Samoa	18,750	Conduct fitting stations and child safety seat clinics, design roadside messages to remind parents and care-givers to buckle up their children, conduct CPS training.
Guam	18,750	Develop and distribute CPS videos for nurseries and day care centers, train CPS technicians, conduct checkpoints.
N. Marianas	18,750	Expand education and outreach activities, conduct NHTSA Standardized CPS Course for technicians and instructors.
Puerto Rico	85,954	Develop messages to address child safety seat misuse, conduct CPS clinics and fitting stations, conduct CPS training.
Virgin Islands	18,750	Develop new CPS booklets, brochures and PSA's, conduct child safety seat clinics and enforcement checkpoints, conduct NHTSA Standardized CPS training for technicians.
B.I.A	56,250	Conduct train-the-trainer courses for NHTSA Standardized CPS course, conduct CPS clinics, workshops, demonstrations and presentations, develop CPS literature and correct use video, establish CPS fitting stations.
Total	7,500,000	

FISCAL YEAR 2000 SECTION 411 STATE HIGHWAY SAFETY DATA IMPROVEMENT GRANTS

State	Grant amount	How state is using grant funds
Alabama	$173,600	Complete a Traffic Records Assessment, update strategic plan, implement statewide electronic submission of traffic citations.
Alaska	173,600	Implement a strategic traffic records plan develop an upgraded crash report, develop health system and crash data linkages and improve traffic records database interface.
Arizona	173,600	Develop a simplified and timely system for data users to retrieve crash data from traffic data systems and improve the compatibility between the two systems, research the development of a statewide citation tracking system, and support and/or provide access to technology to local police agencies that will improve electronic transfer of traffic data and increase on site data gathering.
Arkansas	173,600	Improve timeliness and efficiency of the data entry process for crash reports.
California	173,600	Implemented Department of Motor Vehicles (DMV) Automation of Rural Courts Project that provided automation hardware and software technology to input, send and retrieve traffic conviction and other data electronically, develop a aptop computer system for completing crash reports at crash sites to facilitate the direct entry of data into the crash file, and equip and train Highway Patrol with evidential quality pre-arrest breath testing devices to improve upon the alcohol detection at crash sites and in traffic stops.

FISCAL YEAR 2000 SECTION 411 STATE HIGHWAY SAFETY DATA IMPROVEMENT GRANTS—Continued

State	Grant amount	How state is using grant funds
Colorado	173,600	Complete a software upgrades for remote data entry of crash report data, and initiate development of probability matching of crash data and hospital data.
Connecticut	173,600	Complete a Traffic Records Assessment, update the Traffic Records Strategic Plan, complete an automated crash report form and report analysis package for use by state and local police departments, purchase new software to store the state crash file, develop an electronic ticketing system, complete development of GIS mapping capability, continue development of a data warehouse, and to improve user accessibility to Crash Outcome Date Evaluation System (CODES).
Delaware	173,600	Create an Emergency Medical System (EMS) data network, develop an automated Crash Reporting System, and create a GIS Crash Database.
Florida	173,600	Implement regional data centers, revise crash report instruction manual, crash report training.
Georgia	173,600	Automate crash reporting system, survey & software.
Hawaii	173,600	Develop file linkage, training for local police departments in crash reporting and alcohol screening devices, and develop electronic data transfer system.
Idaho	96,480	Develop a strategic traffic records plan.
Illinois	96,480	Develop a traffic records strategic improvement plan.
Indiana	173,600	Hire committee coordinator, improve crash data access, pilot test new crash location system.
Iowa	173,600	Capture of crash reports electronically, review crash report data, technology transfer, emergency response information and mapping.
Kentucky	173,600	Develop Crash Project Phase IV—Purchase Scanners.
Louisiana	173,600	Implement data entry, electronic data transfer, networking, and document imaging for crash reports and traffic records in State, parish, and local communities.
Maine	173,600	Pilot test an automated crash report form, provide training to state and local police, develop a new crash reporting data base with GIS capabilities capable of receiving crash reports electronically, coordinate Strategic Planning among state agencies, and design a statewide system architecture for integrated traffic records files.
Maryland	173,600	Support a Data Analysis Evaluation Coordinator, improve state crash form, expand scope and use of GIS, and implement statewide training.
Massachusetts	173,600	Update the traffic records assessment and the traffic records strategic plan. Activity continues to improve the quality of CODES data files and to update the state crash report form to comply with MMUCC (Model Minimum Uniform Crash Criteria).
Michigan	173,600	Develop an internet access query system.
Minnesota	173,600	Link two commercial vehicle crash systems, revise crash report form, improve data collection.
Mississippi	173,600	Purchase Software/Hardware for crash & citation data collection, data linkage for state CODES study, revision of crash report.
Missouri	173,600	Develop STARS (Statewide Traffic Accident Reporting System) Data Base, conduct annual conference & workshop, Data Base Evaluation and Consultation.
Nebraska	173,600	Develop Crash file linkage, revise report for electronic transfer, update existing traffic records files.

FISCAL YEAR 2000 SECTION 411 STATE HIGHWAY SAFETY DATA IMPROVEMENT GRANTS—Continued

State	Grant amount	How state is using grant funds
Nevada	173,600	Form an interagency subcommittee of the Traffic Records Committee to develop a 2001 legislative proposal to gain support and funding to implement an updated traffic records system, implement Traffic Accident System Planning and Design Project, and to promote a statewide traffic records conference.
New Hampshire	173,600	Purchase notebook PCs to complete crash reports in the field, revise crash report form to be in compliance with MMUCC, and to develop crash reporting software which can electronically capture driver license/vehicle registration data and Global Positioning System (GPS) location data.
New York	173,600	Upgrade accident information system. This project would allow direct electronic transfer of crash information from investigation agency to the state DMV file. Another project is scheduled to upgrade the ticket file. This upgrade would establish a ticket file electronically on a client server data base and would allow the courts to data-enter ticket disposition information electronically to a data base.
North Carolina	173,600	Develop of a new crash reporting form, pilot test for electronic citation in one State Patrol District, and develop a system to retrieve data via Internet.
North Dakota	96,480	Develop traffic records strategic plan.
Ohio	173,600	Complete interactive Internet web site, capture and image a redesign crash report form.
Oklahoma	173,600	Update traffic records strategic plan, address customer/client access to data bases.
Oregon	173,600	Link health and crash data, DOT crash data retrieval and analysis, crash location upgrade and a Division of Motor Vehicles driver and vehicle files upgrade.
Pennsylvania	173,600	Conduct a series of regional traffic records symposiums to help determine and refine the information needs of the users/customers.
Rhode Island	173,600	Complete successful electronic transfer of crash reports from state and local police agencies to a central repository at DOT. All 39 cities and towns will be on line by September, 2000. State crash file will have capability to reference intersection locations and GIS mapping. Mobile data capture and transfer capability from police cruiser laptops will also exist. ''Canned'' and ad hoc report capability will be available from state crash file. RI will be the first state in the nation with 100 percent of all police agencies participating in electronic transfer of crash data to a central repository.
South Carolina	173,600	Design/implement an upgraded statewide traffic records system with linked citation and crash data.
Tennessee	173,600	Improve state crash reporting equipment, establish data collection in local law enforcement.
Vermont	173,600	Redesign the uniform crash report to be in compliance with MMUCC, develop software for a new crash data storage system which can interface with law enforcement telecommunications systems, pilot test electronic capture of EMS run data, develop software for electronic transfer of data to a central repository at the Department of Transportation, and to provide for Traffic Records System program management capabilities.
Virginia	173,600	Support statewide coordination, perform equipment and inventory assessments, develop communication standards, and develop a training package.

FISCAL YEAR 2000 SECTION 411 STATE HIGHWAY SAFETY DATA IMPROVEMENT GRANTS—Continued

State	Grant amount	How state is using grant funds
Washington	173,600	Upgrade emergency Medical Services trauma registry, develop a collision reporting system with Wisconsin DOT, conduct a traffic records awareness campaign and a collision analysis reporting system with the Washington State Patrol.
West Virginia	96,480	Support statewide coordination and strategic planning development.
Wisconsin	96,480	Develop a traffic records strategic improvement plan.
Puerto Rico	173,600	Contract data processing of Police Accident Report form, pilot test pen based system to improve data collection and the use of Global Positioning System to improve data related to location of crashes.
American Samoa	173,600	Develop a 24/7 network link, obtain computer workstation for police dispatch and e substations, and develop pen based citation system and citation form.
Guam	173,600	Obtain manpower to input crash data, develop pilot project for a pen based citation entry system, and purchase computer system for Traffic Engineering Section.
Northern Marianas	173,600	Improve driver file system by eliminating double typing of license data and exploring adding a bar code/magnetic strip to driver licenses, provide computers and software for EMS database and connect the driver and EMS files to their main crash reporting system.
Total	7,600,000	

SURFACE TRANSPORTATION BOARD

PREPARED STATEMENT OF LINDA J. MORGAN, CHAIRMAN

Chairman Shelby and Members of the Subcommittee, I am Linda J. Morgan, Chairman of the Surface Transportation Board (Board). It is my pleasure to submit the budget request for the Board for fiscal year 2001.

BACKGROUND ON THE BOARD

As you know, on January 1, 1996, the Board was established pursuant to Public Law 104–88, the ICC Termination Act of 1995 (ICCTA). Consistent with the trend toward less economic regulation of the surface transportation industry, the ICCTA eliminated the ICC and, with it, several regulatory functions that it had administered. The ICCTA transferred to the Board core rail functions and certain non-rail adjudicative functions previously performed by the ICC. Motor carrier licensing and certain other motor functions were transferred to the Federal Highway Administration within the Department of Transportation (DOT).

The Board is a three-member, bipartisan, decisionally independent, adjudicatory body organizationally housed within DOT. The rail oversight of the Board encompasses maximum rate reasonableness, car service and interchange, mergers and line acquisitions, and line constructions and abandonments. The important rail reforms of the Staggers Rail Act of 1980 are continued under the ICCTA. The jurisdiction of the Board also includes certain oversight of the intercity bus industry and pipeline carriers; rate regulation involving non-contiguous domestic water transportation, household goods carriers, and collectively determined motor rates; and the disposition of motor carrier undercharge claims. The ICCTA empowers the Board, through its exemption authority, to promote deregulation administratively.

THE BOARD'S FISCAL YEAR 2001 BUDGET REQUEST

The Board's fiscal year 2001 budget request totals $17.954 million and 143 FTEs, essentially adjusting the fiscal year 2000 level for inflation and pay raises.[1] This re-

[1] Attached (Attachment #1) is a table that presents in more detail the specifics of the Board's fiscal year 2001 budget request.

quest reflects the relatively constant workload that is expected and the statutory and regulatory deadlines associated with the resolution of the cases filed. The workload of the Board at any given time, other than motor carrier undercharge cases, remains relatively constant because, even as cases are resolved, new cases are filed.

The Board is confronted with three concerns involving the resources necessary to adjudicate its constant workload and meet statutory and regulatory deadlines. First, the Board must have a way of ensuring that it can hire new employees in sufficient time to be prepared to replace the 45 percent of experienced employees who will be eligible to retire in the next 3 years. While some of these employees may wish to continue to work after their retirement eligibility date, many will not. Second, the Board must have the necessary resources to accommodate any legislative changes that Congress might approve. And lastly, the funding source for the Board must remain stable to carry out its mandate. In this regard, a debate continues over whether the Board ought to be fully funded through user fees, and the Administration has included such a proposal in its fiscal year 2001 budget. Such an approach would require additional legislative authority and until Congress provides new direction, the financing mechanism of appropriations and offsetting collections is the appropriate way to proceed.

OVERALL GOALS OF THE BOARD

In the performance of its functions, the objective of the Board is to ensure that, where regulatory oversight is necessary, it is exercised efficiently and effectively, integrating market forces, where possible, into the overall regulatory model. In particular, the Board seeks to resolve matters brought before it fairly and expeditiously. Through use of its regulatory exemption authority, streamlining of its decisional process and the regulations applicable thereto, and consistent application of legal and equitable principles, the Board seeks to facilitate commerce by providing an effective forum for efficient dispute resolution and facilitation of appropriate business transactions. The Board continues to strive to develop, through rulemakings and case disposition, new and better ways to analyze unique and complex problems, to reach fully justified decisions more quickly, and to reduce the costs associated with regulatory oversight.

To be more responsive to the surface transportation community by fostering governmental efficiency, innovation in dispute resolution, private-sector solutions to problems, and competition in the provision of transportation services, the Board will:

—Continue to strive for a more streamlined process for the expeditious handling of rail rate reasonableness and other complaint cases, in an effort to provide additional regulatory predictability to shippers and carriers;

—Continue to reduce processing time for all cases before the Board, in particular to ensure that appropriate market-based transactions in the public interest are facilitated; and

—Continue to develop new opportunities for the various sectors of the transportation community to work cooperatively with the Board and with one another to find creative solutions to persistent industry and/or regulatory problems involving carriers, shippers, employees, and local communities.

FISCAL YEAR 1999 ACCOMPLISHMENTS OF THE BOARD

During fiscal year 1999, the Board's workload included 926 Board decisions and court-related work, involving adjudications and rulemakings, dealing with rail and non-rail transportation issues. These decisions pertained to rail carrier consolidations; review of rail labor arbitral decisions; rail rates and service; line sales; line constructions; set terms and conditions for continued rail service; and abandonments. They also related to truck rate undercharge cases, intercity bus merger and pooling matters, motor carrier collective ratemaking oversight, and other non-rail matters such as pipeline rate cases.

With respect to rulemaking activity, the Board issued decisions exempting commodities, services, and other classes of transactions from regulation where regulation is not necessary. The Board also issued a decision in STB Ex Parte No. 385 (Sub-No. 4), *Modification of the Carload Waybill Sample and Public Use File Regulations*, putting forth a proposal to more accurately collect data on rail freight traffic as it pertains to rail contract movements. Stemming from its review of rail access and competition issues, the Board issued new rules in STB Ex Parte No. 628, *Expedited Relief for Service Inadequacies*, permitting shippers and connecting railroads who are receiving poor service from an incumbent carrier to seek temporary service from an alternative rail carrier. Also stemming from its rail access and competition review, in STB Ex Parte No. 627, *Market Dominance Determinations—Product and*

Geographic Competition, the Board eliminated product and geographic competition as considerations in determining market dominance in rail rate cases, and denied a petition for reconsideration in this matter. The Board concluded that removing the product and geographic competition evidentiary standards would expedite rail rate cases in accordance with Congressional intent, and would further level the playing field between railroads and shippers regarding rate disputes. In Ex Parte No. 574, *Safe Implementation of Board-Approved Transactions*, the Board and the Federal Railroad Administration (FRA) have proposed that joint rules be established setting forth procedures for developing and implementing safety integration plans concerning financial transactions presented for consideration to the Board. In STB Ex Parte No. 527 (Sub-No. 2), *Expedited Procedures for Processing Rail Rate Reasonableness Exemption and Revocation Proceedings*, the Board finalized a rulemaking seeking to clarify the exemption and revocation procedures as to when additional information would be sought in response to a petition.

With regard to specific cases, the Board made progress toward resolving pending rail and pipeline rate complaints, including STB Docket No. 42022, *FMC Wyoming Corporation and FMC Corporation* v. *Union Pacific Railroad Company*; STB Docket No. 42038, *Minnesota Power, Inc.* v. *Duluth, Missabe, and Iron Range Railway Company*; STB Docket No. 42027, *Northern Indiana Public Service Company* v. *Consolidated Railroad Corporation*; STB Docket No. 41687, *Grain Land Coop.* v. *Canadian Pacific Limited and Soo Railroad Company d/b/a CP Rail System*; and STB Docket No. 41685, *CF Industries, Inc.* v. *Koch Pipeline Company, L.P.*. In addition, STB Docket No. 41295, *Pennsylvania Power & Light Company* v. *Consolidated Rail Corporation, CSX Transportation Inc. and Norfolk Southern Railway Company,* and STB Docket No. 42034, *PSI Energy, Inc.* v. *CSX Transportation, Inc. and Soo Line Railroad Company d/b/a Canadian Pacific Railway,* were resolved voluntarily by the parties—it is important to note, however, that the Board had done significant work on these cases by the time they were settled. Finally, the Board defended court challenges to its decisions in the *Bottleneck, McCarty Farms, and Huron Valley* rail rate proceedings.

With respect to rail restructuring, the Board continued its oversight of the Union Pacific/Southern Pacific (UP/SP) merger and the Conrail acquisition. Furthermore, the Board issued a decision approving the acquisition of the Illinois Central (IC) by the Canadian National (CN). The Board also issued various decisions relating to the conditions imposed in the UP/SP merger and the Conrail acquisition proceedings.

The Board issued decisions and participated in court proceedings on various other rail matters, including 378 rail abandonment decisions, 25 rail line construction decisions, and 190 short-line and non-carrier acquisition decisions. In particular, the Board has done significant work on the transportation and environmental issues associated with the construction and operation of a 281-mile segment of the Dakota, Minnesota & Eastern Railroad (DM&E) in Wyoming (STB Finance Docket No. 33407, *Dakota, Minnesota, & Eastern Railroad Corporation Construction into the Powder River Basin*). This project would allow DM&E to extend its existing system westward to access coal mines in the Powder River Basin.

Regarding other rail matters, the Board issued a decision setting the terms and conditions under which Amtrak could reintroduce rail passenger service between Boston, MA and Portland, ME (STB Finance Docket No. 33381, Application of the National Railroad Passenger Corporation Under 49 U.S.C. 24308(a)—Springfield Terminal Railway Company, Boston and Maine Corporation, and Portland Terminal Company). The Board also continued its work on the joint task force with the Department of Agriculture to address shipper and railroad information needs related to recurring seasonal problems affecting grain transportation.

Non-rail decisions included 28 motor carrier undercharge decisions and 22 decisions dealing with intercity bus merger cases and pooling agreements, as well as action related to motor carrier rate bureaus.[2] The Board also has worked on STB Docket No. WCC–101, *Government of the Territory of Guam* v. *Sea-Land Service, Inc., American President Lines, Ltd., and Matson Navigation Company, Inc.*, and STB Docket No. WCC–102, *Ocean Logistics Management, Inc.* v. *NPR, Inc. and Holt Cargo Systems, Inc.*, involving rates in the non-contiguous domestic water trade.

FISCAL YEAR 2000 AND 2001 ACTIVITIES OF THE BOARD

Attached is a table (Attachment #2) that shows workload trends and accomplishments, which form the basis for the Board's request to essentially maintain the current level of funding in fiscal year 2001. As the table indicates, the Board believes

[2] These numbers are subsets of the decisions included in the workload summary table that follows.

that the number of decisions issued and court-related work are the best measures of workload and performance. In accordance with the Board's continued commitment to resolving matters before it expeditiously, it anticipates a relatively constant workload and output through fiscal year 2001.

During fiscal year 2000 and 2001, the Board will continue to look for ways to streamline or otherwise improve applicable regulations and the regulatory process and will resolve as expeditiously as possible petitions for rulemaking filed by parties. In addition, the Board will continue to monitor the implementation of rulemaking decisions and private-sector initiatives and agreements reflecting the Board's directives stemming from its rail access and competition proceedings conducted in fiscal year 1998 and 1999.

Regarding major restructuring activity among larger railroads in general, the Board held public hearings on March 7–10, 2000, on major rail consolidations and the present and future structure of the North American rail industry. This hearing addressed the industry's restructuring that has occurred to date and the prospect for future restructuring. The Board also, among other issues, addressed the effects of railroad consolidations on the financial condition of the railroad industry and the industry's ability to provide responsive service at reasonable prices. As a result of the testimony presented, the Board issued a decision on March 17, 2000, directing large railroads not to pursue for 15 months further merger activities before the Board until it has adopted new rules governing merger proceedings.

With respect to rail carrier consolidations, workload is expected to increase in fiscal year 2000 and fiscal year 2001. The Board will continue to monitor the UP/SP merger, the Conrail acquisition, and the CN/IC merger pursuant to the five-year oversight conditions that the Board imposed as part of its approval of those transactions, and will continue to handle any proceedings dealing with the interpretation of other conditions imposed as part of the Board's approvals. In addition, the Board will be defending its March 17 decision to suspend major rail mergers until merger regulations are revised, and will be working on rail merger rule changes called for in that decision, which are to be finalized by mid-June 2001.

Regarding rail rates and services, the workload is expected to increase in fiscal year 2000 and again in fiscal year 2001, in particular due to the continuing expiration of long term coal transportation contracts, the potential filing of complaints under the Board's non-coal rate guidelines, and the application of the Board's bottleneck decision. These new cases will be complex and require significant staff attention as new standards are tested and shortened timeframes for completion of rate proceedings are met. Also, the Board has a number of complaint cases involving grain car allocation procedures and unreasonable practices involving alleged breaches of common carrier obligation to provide reasonable car service on request, which it will be processing. In addition, the Board will proceed with its 3-year study (Buffalo Rate Study) examining linehaul and switching rates for rail movement into and out of the State of New York's Buffalo area following the Conrail acquisition. The Board also will continue to work on the various pending rate matters previously referenced.

In connection with other rail matters, rail abandonment decisions are expected to increase slightly in fiscal year 2000 and then remain stable through fiscal year 2001, reflecting the increased complexity of abandonment filings requiring more than one decision. The Board will continue to handle several rail line construction projects, which involve significant environmental review issues, and we project that line construction proceedings will increase in fiscal year 2000 and remain constant through fiscal year 2001. For example, the Board continues work on an application filed by Tongue River Railroad for the proposed construction of an alternative route for a line already approved for construction (STB Finance Docket No. 30186 (Sub-No. 3), *Tongue River Railroad Company—Construction and Operation—Western Alignment*). In addition, the Board continues to make progress toward resolving the environmental issues associated with the DM&E case referenced earlier. In Finance Docket No. 33824, *Great Salt Lake and Southern Railroad, LLC—Construction and Operation—in Tooele County, UT*, the applicant has recently filed for permission to construct and operate a 32 mile rail line connected with the interim storage of spent nuclear fuel. Other line transaction activity is expected to remain somewhat constant in fiscal year 2000 and fiscal year 2001 as carriers continue to buy and sell unprofitable or marginally profitable lines as alternatives to service abandonment.

Other rail activities, such as case activity involving passenger rail issues and review of labor arbitral decisions, are expected to increase in fiscal year 2000 and fiscal year 2001. During fiscal year 1999, the Boards saw an increase in cases involving interpretations of labor conditions and arbitration appeals resulting from rail consolidations and other rail transactions. In fiscal year 2000 and 2001, the Board projects that this trend will continue due to recently decided rail mergers. Another

area of possible workload increase involves passenger rail and, in particular, disputes related to the use by Amtrak of tracks of the freight railroads.

Regarding non-rail matters, the truck rate undercharge workload has decreased significantly from pre-fiscal year 1998 levels and will remain relatively constant through fiscal year 2001 as the Board works to close out its undercharge docket. The reduction in undercharge decisions reflects the Board's continuing commitment to resolve its undercharge docket. Other non-rail activities, including intercity bus merger and pooling proceedings and non-contiguous domestic water trade and pipeline rate cases, are expected to increase in fiscal year 2000 and fiscal year 2001. For example, although the WCC–102 proceeding referenced earlier has just been settled by the parties, the Board will be working on two other recently filed water carrier cases, STB Docket No. WCC–104, *Trailer Bridge, Inc.* v. *Sea Star Lines, LLC*, and STB Docket No. WCC–105, *DHX, Inc.* v. *Matson Navigation Company, et al*. And in accordance with a Board decision issued in early fiscal year 1999, during fiscal year 2000 and 2001, the Board expects to finally resolve the circumstances under which motor carrier rate bureau agreements should be continued.

SUMMARY

The Board's budget request would ensure the resources needed for the Board to continue to implement its responsibilities expeditiously and effectively as Congress intends. I would be happy to answer any other questions that the Committee may have about the Board's fiscal year 2001 budget request.

ATTACHMENT 1.—SALARIES AND EXPENSES

[Dollars in thousands]

	Fiscal year			Difference from Enacted
	1999 actual	2000 enacted	2001 request	
Permanent Positions	131	140	[3] 143	3
Full-time Equivalents	131	140	143	3
Personnel Compensation and Benefits	$12,420	$13,391	$14,122	$731
Former Personnel	14	5	10	5
Travel	32	49	49	.....
Other Costs	3,481	3,495	3,773	278
Total Budget Resources	15,947	16,940	17,954	1,014

[3] The requested increase in FTEs will allow the Board to hire entry level staff to replace the tenured, retirement-eligible staff prior to their retirement dates. This would ensure the required transition for current staff to new staff, who can gain working knowledge and expertise necessary to process the Board's workload.

CHANGES IN RESOURCES

For personnel compensation and benefits, $14,122,000 is requested to support the Board's permanent positions. This is an increase of $731,000 over fiscal year 2000, of which $152,000 is required to fund the annual cost of the January 2000 pay raise and $387,000 is required for the January 2001 pay raise estimated at 3.7 percent. The request also includes $50,000 for lump-sum leave payments to retiring employees.

Funding for costs for former personnel unemployment payments is requested at $10,000, which is an increase of $5,000 from fiscal year 2000. This request is for unemployment compensation payments to former employees who were separated from Federal service.

A travel budget of $49,000 is requested primarily for on-site visits to railroads to finalize audits and review public accountants' workpapers, for physical inspection of proposed rail abandonment and construction sites and verification of environmental data provided by parties to proceedings, for defense of the Board's decisions in courts across the country, and for the general presentation upon request of issues within the Board's jurisdiction.

Funding to cover other costs is requested at $3,773,000, a $278,000 increase over fiscal year 2000. Included in this number is a rental payment increase directed by the General Services Administration (GSA) and regular cost increases in telephone service, copier rental, office supplies, and reimbursable services acquired from other Federal agencies.

ATTACHMENT 2.—FISCAL YEAR 2001 OMB BUDGET JUSTIFICATION WORKLOAD SUMMARY [4]

Workload Category	Actual fiscal year 1999 board decisions and court-related work	Estimated [5] fiscal year 2000 board decisions and court-related work	Estimated [4] fiscal year 2001 board decisions and court-related work
Rail Carrier Consolidations	117	199	197
Rail Rates and Service	60	95	104
Rail Abandonments and Constructions	403	442	442
Other Line Transactions	190	185	185
Other Rail Activities	67	102	101
Motor Carrier Undercharges	[5] 28	38	26
Non-Rail Activities	61	109	113
Total Decisions	[6] 926	1,170	1,168

[4] At this time, the Board believes that the number of Board decisions and court-related work are the best measures of workload at the Board. Certain activities performed at the Board that provide direct and indirect support to rulemakings and decisions in specific cases are not reflected in these workload numbers. Such activities not reflected include: enforcement action; rail audits and rail carrier reporting oversight; administration of the rail waybill sample and development of the Uniform Rail Costing System; and case-related correspondence and informal public assistance.

[5] Estimated workloads for fiscal year 2000 and 2001 are based on historical information regarding actual filings and best estimates of probable future filings by parties. Because the Board is principally an adjudicatory body, it does not directly control the level or timing of actual case filings.

[6] The motor carrier undercharge decisions projected for fiscal year 1999 have decreased from previous estimates. This decrease reflects the Board's consolidation of several undercharge case dockets into a single decision.

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

BOARD MEMBERS' TERMS AND STAFFING

Question. When do the terms of the current Board members expire? When was Ms. Morgan renominated and confirmed for another term?

Answer. The ICC Termination Act of 1995 (ICCTA) provided that the term for each Member of the Board shall be 5 years and shall begin when the term of the predecessor of that Member ends. Also under the ICCTA, a Board Member can only be reappointed for one additional term and, if not reappointed, cannot serve more than one year past the expiration of his or her term.

Board Members and Expiration of Terms.—William Clyburn Jr., December 31, 2000; Wayne O. Burkes, December 31, 2002; Linda J. Morgan, December 31, 2003.

Chairman Morgan was renominated for a second term by President Clinton on August 6, 1999, confirmed by the United States Senate on November 10, 1999, and sworn in on December 1, 1999.

Question. How many staff are in each Board Member's office? What are the job titles, GS level, and salary for each of these positions? Are there currently any vacancies in the Members' personal staff?

Answer. Each Board Member has a staffing allocation of 3 FTEs, and the Chairman has a staffing allocation of 3.5 FTEs. The allocations include slots for the Board Member, an administrative assistant, and professional staff. The following table reflects the current staffing of each Board Member's office.

Job title	GS level	Salary
Chairman Morgan:		
Chief of Staff	GS–905–15	$110,028
Special Assistant	GS–301–13	66,979
Attorney-Advisor [1]	GS–905–15	110,028
Vice-Chairman Burkes:		
Expert	GS–2110–00	101,140
Executive Assistant	GS–301–11	44,148
Attorney-Advisor [2]	GS–905–15	110,028
Commissioner Clyburn:		
Staff Advisor	GS–301–12	59,738

Job title	GS level	Salary
Attorney-Advisor [2]	GS–905–15	107,207

[1] Employee has been shared with Office of the General Counsel and will be returning full-time to the General Counsel's office shortly.
[2] On full-time detail from the Office of Proceedings.

Based on the allocations, there is technically a staffing vacancy in the Office of Commissioner Clyburn because his professional staff person is on detail from another office.

HIRING PROCESSES

Question. Please describe the hiring practices of Surface Transportation Board staff, either for the Member's personal staffing or in the program offices. What is the average time for hiring a new STB staff person (both in-house hires and promotions and new hires from outside the agency)? Is there any input from the Department of Transportation in this decisionmaking? If so, why?

Answer. There are 3 types of hiring methods at the Board. The length of time to recruit depends on the type of hiring process and whether the Board is hiring experienced candidates or entry-level candidates. In-house hiring or merit promotions, which are limited to Board candidates, can be completed within 2–3 weeks after the process is begun. Outside recruiting of status candidates (current Federal employees) can take 6–8 weeks for a Government-wide dissemination of the job announcement and recruitment for qualified candidates. Outside, open-market recruiting can take 7–12 weeks after the request is made by a program manager. The Board uses the services of the Office of Personnel Management, on a reimbursable basis, to provide the required nationwide staffing, recruiting activities, and evaluation of applicants for the vacancies. Under each method, after a listing of qualified candidates is provided to the program manager, the interviewing process is completed, and a selection is made, a candidate could be expected to begin employment at the Board within 4–6 weeks after selection. The Department of Transportation (DOT) has no input in the recruiting or final selection of the Board's candidates.

RELATIONSHIP WITH DEPARTMENT OF TRANSPORTATION

Question. The Surface Transportation Board is an independent adjudicatory body organizationally housed within the Department of Transportation (DOT). Please describe the Board's relationship with DOT, and describe in detail what being "organizationally housed within DOT" entails, particularly as it affects support services, administration, staff decisions, or other non-adjudicatory functions of the Board?

Answer. The Board and DOT have worked together cooperatively to ease any logistical challenges associated with a decisionally independent body organizationally housed within DOT. The Board's decisional independence is explicitly expressed in the ICCTA. However, the Office of the Secretary is apprised of rulemakings and adjudications as they are served or published. DOT may appear before the Board as a party in the Board's proceedings, just as DOT appeared before the Interstate Commerce Commission (ICC) as a party. Any role or input that DOT might wish to have in a Board proceeding, as with any other party, is through a filing of public record.

Organizationally, the Board is housed in DOT for a variety of administrative and financial reporting provisions. The Board's annual budget request and reporting of obligations incurred are included with DOT's submissions to the Office of Management and Budget (OMB) and the Department of the Treasury; however, the Board is required by Public Law 104–88 to transmit copies of its budget requests to Congress at the same time they are sent to the Secretary of Transportation and DOT is required to provide an assessment of the budgetary needs of the Board in the President's Budget. The Board's personnel statistical data are included with DOT's for reporting purposes to the Office of Personnel Management. However, as the law provides, in the performance of Board functions, the personnel of the Board shall not be responsible to or subject to the supervision or direction of any officer of any other part of DOT. The law also provides that the Board shall perform all functions that, immediately before the effective date of ICCTA, were functions of the ICC or were performed by any employee of the ICC in the capacity as such officer or employee. In order to maintain its adjudicatory independence, the Board performs a few administrative and financial functions in-house. The Board obtains, on a reimbursable basis, those administrative functions that are more cost efficient to be performed outside the Board from other sources.

FUNDING HISTORY

Question. Please update the table found on page 607 of Senate hearing record 106–221, displaying the Board's funding request, the Administration's request, the enacted funding level, and the end of year staffing level for each fiscal year from fiscal year 1996 to that requested for fiscal year 2001. Please display both appropriated funds and offsetting collections.

Answer. The following table displays the funding history of the Interstate Commerce Commission (ICC) and the Board for fiscal years 1996 through 2001.

BUDGET REQUESTS & ENACTED APPROPRIATIONS

	ICC Fiscal year 1996 [7]	STB Fiscal year					
		19966 [7]	1997	1998	1999	2000	2001
Board:							
Appropriation	$32,892,000	.....	$12,344,000	$12,753,000	$14,190,000	$15,821,000	$17,054,000
Offsetting Collections	8,300,000	.....	3,000,000	3,100,000	2,000,000	1,200,000	900,000
Budget Request	41,192,000	.....	15,344,000	15,853,000	16,190,000	17,021,000	[8] 17,954,000
President:							
Appropriation	33,202,000	.....	.....	.....	.....	.....	.....
Offsetting Collections	8,300,000	.....	15,344,000	14,300,000	16,000,000	17,000,000	17,954,000
Budget Request	41,502,000	.....	15,344,000	14,300,000	16,000,000	17,000,000	17,954,000
Enacted:							
Appropriation [9]	13,379,000	$8,414,000	12,244,000	13,850,000	15,990,000	16,930,000	.....
Offsetting Collections [10]	3,200,000	652,000	3,000,000	2,000,000	2,600,000	[11] 1,600,000	.....
Budget Request	16,579,000	9,066,000	15,244,000	15,850,000	15,990,000	16,930,000	.....
End of Year:							
Staffing Level	[12] 317	132	127	130	137	140	143
FTE Level	[12] 86	106	131	129	131	140	143

[7] During fiscal year 1996, the ICCTA was passed, the ICC was eliminated effective December 31, 1995, and the Board was established effective January 1, 1996. The enacted funding levels for the ICC for fiscal year 1996 reflect ICC operational and termination expenses for one quarter of the fiscal year and the Board funding levels for fiscal year 1996 reflect Board operational expenses for three-quarters of the fiscal year.

[8] The Board's fiscal year 2001 budget request essentially represents the Board's current funding level (for fiscal year 2000) plus inflationary and personnel salary increases.

[9] Enacted appropriations less enacted rescissions.

[10] Actual offsetting collections. In fiscal year 1997, there was a carryover of $625,031 over the obligational limitation. In fiscal year 1998 , there was a carryover of $315,586 over the obligational limitation.

[11] The fiscal year 1999 and fiscal year 2000 enacted appropriations provided that fees not to exceed $2,600,000 and $1,600,000, respectively, shall be credited to this appropriation as offsetting collections and that the sum appropriated shall be reduced on a dollar for dollar basis as such offsetting collections are received.

[12] As of December 31, 1995.

USER FEES AND OFFSETTING COLLECTIONS

Question. Please update the table on page 608 of Senate Hearing record 106–221, displaying in tabular form the level of anticipated user fee income in the Board's fiscal year 1998, 1999, 2000, and 2001 budget requests. Please also include columns displaying the President's budget assumptions for user fee income in each of these four fiscal years. In addition, please display the level of user fee offsets included in the appropriations legislation for the Board in fiscal years 1998, 1999, and 2000. Finally, please include columns displaying the actual amount of offsetting user fees collected in fiscal years 1998 and 1999, and projected through the end of fiscal year 2000.

Answer. The following table displays the offsetting collection of user fees for fiscal year 1998 through 2001.

	STB			
	Fiscal year			
	1997	1998	1999	2000
User Fee Anticipated Income in Budget Request	$3,100,000	$2,000,000	$1,200,000	$900,000
President's Budget Assumptions	14,300,000	16,000,000	17,000,000	17,954,000
User Fee Offsets in Appropriations Language	2,000,000	[13] 2,600,000	1,600,000	.....
Offsetting Collections Actual	[14] [15] 2,315,586	802,883	[16] 462,731	.....
Projected end of fiscal year	.....	.....	765,000	.....

[13] The fiscal year 1999 and fiscal year 2000 enacted appropriation provided that fees not to exceed $2,600,000 and $1,600,000, respectively, shall be credited to this appropriation as offsetting collections and that the sum appropriated shall be reduced on a dollar for dollar basis as such offsetting collections are received.

[14] These figures include $67,050 in fiscal year 1998 in user fees associated with the Conrail acquisition.

[15] This figure includes $966,700 in user fees associated with the Canadian National Railway/Illinois Central merger.

[16] User Fees collected 10/1/99–03/31/00.

Question. The Office of Management and Budget has proposed that the Appropriations Committees strike the fiscal year 2000 language providing that any fees collected by the Board be credited to this appropriation as offsetting collections. This provision holds the Board harmless from any shortfall in collection of user fees. Why is the fiscal year 2000 enacted provision necessary?

Answer. The Board prefers the bill language as provided in the fiscal year 2000 appropriations law that allows the user fees to be credited to the appropriation as offsetting collections and to reduce the general fund appropriation on a dollar for dollar basis as the fees are received and credited. Administratively, the tracking of the collection of fees has been simplified as a result of this approach. Under this provision, the Board receives the operating cash from one source and deposits and credits the user fees collected to the general fund appropriation, thereby reducing the overall general fund appropriation required for operating expenses of the Board. Prior to this provision, the Board was required to spend considerable staff hours tracking the user fees collected by category and forecasting the user fee categories monthly to derive an end-of-year projection to ensure that there were sufficient resources to supplement the appropriation. Also, the financial forecasting relating to day-to-day operations constrained fiscal year planning due to the uncertainty of the total resources available for the Board's operation.

Question. Why is the requested and anticipated level of user fee collection in fiscal year 2001 ($900,000) so much lower than that expected for fiscal year 2000 ($1,600,000) or fiscal year 1999 ($2,600,000)?

Answer. Based on the fiscal year 1999 actual user fee collections of $802,883, the Board projected that $900,000 would be collected in fiscal year 2001. The basis for this projection presumed the same level of collection activity as in fiscal year 1999 and added the governmental pay raise and inflationary adjustment effects of the 2000 Update and 2001 Update on the fee items. We do not have any updated data to indicate that this estimate for fiscal year 2001 would change significantly.

COMPARISON OF FISCAL YEAR 1999 AND 2000 USER FEE COLLECTIONS

Question. What level of assessed user fees was collected in fiscal year 1999? Please discuss the reasons for any delta above or below the fiscal year 1999 enacted level of $2,600,000 in offsetting collections. What is anticipated to be assessed in fiscal year 2000? What has been the actual user fee collection level thus far in fiscal

year 2000? Please discuss the reasons for any anticipated delta above or below the fiscal year 2000 enacted level of $1,600,000 in offsetting collections.

Answer. The Board collected $802,883 in user fees in fiscal year 1999. The Subcommittee had set the fiscal year 1999 collection level of $2,600,000 anticipating a major rail merger filing with the associated ancillary filings such as abandonments, trackage rights, and line sales that normally accompany a major rail merger. However, this filing activity did not materialize during fiscal year 1999. Also, user fee collections were averaging $100,000 per month during fiscal year 1998, which contributed to the base projection for the fiscal year 1999 enacted level.

The Board projects that it should collect an estimated $765,000 by September 30, 2000. The Subcommittee had set the fiscal year 2000 collection level of $1,600,000 anticipating that more high-dollar user fees would be collected. However, as shown in the table below, the Board has collected $462,730 in user fees from October 1, 1999, to March 31, 2000. That collection includes three rail construction applications at $48,800 each and one rate complaint under the coal rate guidelines at $54,500. Excluding these four one-time large fees, the monthly average for the six-month period is $44,000 per month. The Board collected $401,142 for that same period of time last year. The breakdown is as follows:

MONTHLY USER FEE COMPARISON: YEAR TO DATE

Months	Fiscal year	
	1999	2000
October	$63,199	$117,355
November	45,178	58,658
December	78,255	56,351
January	103,581	154,320
February	69,902	46,962
March	41,027	29,084
Total	401,142	462,730

Question. What was the amount of carryover user fees from fiscal year 1999 which was available for obligation after October 1, 1999?

Answer. The Board still has the $940,617 remaining that was carried over from the two fiscal years in which there were Class I rail mergers that resulted in user fee collections exceeding the Congressional limits for those fiscal years. The Board has been able to fiscally manage its workload within the fiscal year appropriation limits provided by Congress. Should the Board require additional funding resources for unanticipated caseload and additional cases requiring processing within tight statutory timeframes, the Board would seek to use the carryover funds.

COMPARISON OF RECENT USER FEE SCHEDULE UPDATES

Question. Has the Surface Transportation Board updated its user fee schedule for 2000? If so, please detail in tabular form the 2000 user fee update schedule, including all fee items or sub-fee items, including both the 1999 and 2000 fee amounts, with a column showing the amount of increase, if any (similar to the table found on pages 611–617 of Senate hearing record 106–221).

Answer. The following table lists the Board's user fee schedule as experienced in Ex Parte No. 542, *Regulations Governing Fees For Services Performed In Connection With Licensing And Related Services*, for fiscal year 1997, 1998, and 1999. The fee increase column reflects the net change between the fiscal year 1997 and 1999 fees. The fiscal year 1999 fee schedule is currently in effect. The fiscal year 2000 fee schedule has not yet been adopted by the Board. When the fiscal year 2000 user fee schedule is adopted, we will provide the Subcommittee with a revised table that includes fee data for fiscal year 1998, 1999, and 2000.

COMPARISON OF STB EX PARTE NO. 542 (SUB-NO. 1 FEE SCHEDULE TO STB EX PARTE NO. 542 (SUB-NO. 3) FEE SCHEDULE

FEE DESCRIPTION	STB EP 542 (Sub-No. 1)		STB EP 542 (Sub-No. 2)		STB EP 542 (Sub-No. 3)		Diff.	Percent change
	Current fee		New Fee		New Fee			
	Item	Amount	Item	Amount	Item	Amount		
APPLIC. POOLING OR DIV. TRAFFIC NON-RAIL	1.0	$2,600	1.0	$2,800	1.0	$2,900	$300	11.54
APPLIC. PURCHASE, LEASE—MC PASSANGERS	2.0	1,200	2.0	1,300	2.0	1,300	100	8.33
APPLIC. APPROVAL NON-RAIL RATE ASSOC. AGREEMENT	3.0	16,500	3.0	17,900	3.0	18,100	1,600	9.70
APPLIC. AMEND NON RAIL-RATE ASSOC.—SINGF	4.1	2,700	4.1	3,000	4.1	3,000	300	11.11
AMEND NON-RAIL RATE ASSOC. AGREE—MINOR	4.2	60	4.2	60	4.2	60	.....	.....
APPL. FOR TEMPORARY AUTHORITY MC PASSENG	5.0	300	5.0	300	5.0	300	.....	.....
APPL. EXTENSION OR ACQUIS. OR OPERATION	11.1	4,300	11.1	4,700	11.1	4,700	400	9.30
NOTICE OF EXEMPTION 1150.31–1150.35	11.2	1,100	11.2	1,200	11.2	1,200	100	9.09
PETITION FOR EXEMPTION (EXCEPT CONSTRUCTION)	11.3	7,500	11.3	8,100	11.3	8,200	700	9.33
APPL. INVOLVING THE CONSTRUCTION OF A LINE	12.1	44,500	12.1	48,300	12.1	48,800	4,300	9.66
NOTICE OF EXEMPTION 1150.36 CONSTRUCTION	12.2	1,100	12.2	1,200	12.2	1,200	100	9.09
PETITION FOR EXEMPTION CONSTRUCTION OF LINE	12.3	44,500	12.3	48,300	12.3	48,800	4,300	9.66
FEEDER LINE DEVELOPMENT PROGRAM APPLICATION	13.0	2,600	13.0	2,600	13.0	2,600	.....	.....
APPL. CLASS II–III ACQUIRE OR EXTE LINE	14.1	3,700	14.1	4,000	14.1	4,100	400	10.81
NOTICE OF EXEMPT. ACQUIRE OR EXTEND LINE	14.2	1,100	14.2	1,200	14.2	1,200	100	9.09
PETITION FOR EXEMPT ACQUIRE OR EXTEND LINE	14.3	3,900	14.3	4,300	14.3	4,300	400	10.26
NOTICE OF MODIFIED CETIFICATE PC&N	15.0	1,000	15.0	1,100	15.0	1,100	100	10.00
APPLIC. TO ABANDON OR DISCONTINUE SERVICE	21.1	13,200	21.1	14,300	21.1	14,500	1,300	9.85
NOTICE OF EXEMPTION ABANDON OR DISCONTINUE	21.2	2,200	21.2	2,400	21.2	2,500	300	13.64
PETITION FOR EXEMPT. ABANDON OR DISCONTINUE	21.3	3,800	21.3	4,100	21.3	4,100	300	7.89
APPLIC. TO ABANDON CRC–NE RAIL SERVICE	22.0	250	22.0	300	22.0	300	50	20.00
ABANDONMENT FILED BY BANKRUPT RAILROAD	23.0	1,100	23.0	1,200	23.0	1,200	100	9.09
WAIVER REQUEST FOR FILING REQUIRE—ABANDONMENT	24.0	1,000	24.0	1,100	24.0	1,100	100	10.00
OFFER OF FINANCIAL ASSISTANCE (OFA)	25.0	900	25.0	1,000	25.0	1,000	100	11.11
OFA—SET TERMS AND CONDITIONS	26.0	13,500	26.0	14,600	26.0	14,800	1,300	9.63
REQUEST FOR A TRAILS USE CONDITION	27.0	150	27.0	150	27.0	150	.....	.....
APPLIC. FOR USE OF TERMINAL FACILITIES	36.0	11,300	36.0	12,3,00	36.0	12,400	1,100	9.73
AAPLIC. POOLING OR DIV. TRAFFIC (RAIL)	37.0	6,100	37.0	6,600	37.0	6,700	600	9.84

APPLIC. TO MERGE OR CONSOLIDATE—MAJOR	38.1	889,500	38.1	966,700	38.1	976,500	87,000	9.78
APPLIC. TO MERGE OR CONSOLIDATE—SIGNIFICANT	38.2	177,900	38.2	193,300	38.2	195,300	17,400	9.78
APPLIC. TO MERGE OR CONSOLIDATE—MINOR	38.3	4,700	38.3	5,000	38.3	5,200	500	10.64
NOTICE OF EXEMPTION MERGE OR CONSOLIDATE	38.4	1,000	38.4	1,100	38.4	1,100	100	10.00
RESPONSIVE APPLICATION MERGE OR CONSOLIDATE	38.5	4,700	38.5	5,000	38.5	5,200	500	10.64
PETITION FOR EXEMPTION MERGE OR CONSOLIDATE	38.6	5,600	38.6	6,100	38.6	6,100	500	8.93
APPLIC. NON-CARRIER TO CONTROL—MAJOR	39.1	889,500	39.1	966,700	39.1	976,500	87,000	9.78
APPLIC. NON-CARRIER TO CONTROL—SIGNIFICANT	39.2	177,900	39.2	193,300	39.2	195,300	17,400	9.78
APPLIC. NON-CARRIER TO CONTROL—MINOR	39.3	4,700	39.3	5,000	39.3	5,200	500	10.64
NOTICE OF EXEMPTION NON-CARRIER CONTROL	39.4	850	39.4	900	39.4	900	50	5.88
RESPONSIVE APPLICATION NON-CARRIER CONTROL	39.5	4,700	39.5	5,000	39.5	5,200	500	10.64
PETITION FOR EXEMPTION NON-CARRIER CONTROL	39.6	5,600	39.6	6,100	39.6	6,100	500	8.93
APPLICATION TO ACQUIRE TRACK RIGHTS—MAJOR	40.1	889,500	40.1	966,700	40.1	976,500	87,000	9.78
APPLICATION TO ACQUIRE TRACK RIGHTS—SIGNIFICANT	40.2	177,900	40.2	193,300	40.2	195,300	17,400	9.78
APPLICATION TO ACQUIRE TRACK RIGHTS—MINOR	40.3	4,700	40.3	5,000	40.3	5,200	500	10.64
NOTICE OF EXEMPTION ACQUIRE TRACK RIGHTS	40.4	750	40.4	800	40.4	800	50	6.67
RESPONSIVE APPLICATION ACQUIRE TRACK RIGHTS	40.5	4,700	40.5	5,000	40.5	5,200	500	10.64
PETITION FOR EXEMPTION ACQUIRE TRACK RIGHTS	40.6	5,600	40.6	6,100	40.6	6,100	500	8.93
APPL. OF CARRIER TO PURCHASE PROP—MAJOR	41.1	889,500	41.1	966,700	41.1	976,500	87,000	9.78
APPL. OF CARRIER TO PURCHASE PROP—SIGNIFICANT	41.2	177,900	41.2	193,300	41.2	195,300	17,400	9.78
APPL. OF CARRIER TO PURCHASE PROP—MINOR	41.3	4,700	41.3	5,000	41.3	5,200	500	10.64
NOTICE OF EXEMPTION CARRIER PURCH PROPERTY	41.4	850	41.4	950	41.4	950	100	11.76
RESPONSIVE APPLICATION CARRIER PURCH PROPERTY	41.5	4,700	41	5,000	41.5	5,200	500	10.64
PETITION FOR EXEMPTION CARRIER PURCH PROPERTY	41.6	3,900	41.6	4,300	41.6	4,300	400	10.26
NOTICE OF A JOINT PROJECT INVOLVE RELOCATION	42.0	1,500	42.0	1,600	42.0	1,600	100	6.67
APPLIC. RAIL RATE ASSOCIATION AGREEMENT	43.0	41,600	43.0	45,200	43.0	45,700	4,100	9.86
AMENDMENT RAIL RATE AGREEMENT—SIGNIFICANT	44.1	7,700	44.1	8,400	44.1	8,500	800	10.39
AMENDMENT RAIL RATE AGREEMENT—MINOR	44.2	60	44.2	60	44.2	60	.....	.....
AUTHORITY TO HOLD POSITION—OFFICER/DIRECTOR	45.0	450	45.0	500	45.0	500	50	11.11
PETITION FOR EXEMPTION BY RAIL NOT OTHER COVERED	46.0	4,800	46.0	5,200	46.0	5,200	400	8.33
AMTRAK CONVEYANCE PROCEED. 45 USC 562	47.0	150.00	47.0	150.00	47.0	150.00	.00	.00
AMTRAK COMPENSATION PROCEED. SEC. 402(a)	48.0	150	48.0	150	48.0	150	.....	.....
COMPLAINT FILED UNDER COAL RATE GUIDELINES	56.1	23,300	56.1	27,000	56.1	54,500	31,200	133.91
FOR COMPLAINT—RAIL MAXIMUM RATES—SMALL SHIPP	56.2	1,000	56.2	1,000	(1)	(1)	.....	.....
COMPLAINT—ALL OTHER EXCEPT COMPETITIVE ACCESS	56.3	2,300	56.3	2,600	56.2	5,400	3,100	134.78
COMPETITIVE ACCESS COMPLAINT	56.4	150	56.4	150	56.3	150	.....	.....

COMPARISON OF STB EX PARTE NO. 542 (SUB-NO. 1 FEE SCHEDULE TO STB EX PARTE NO. 542 (SUB-NO. 3) FEE SCHEDULE—Continued

FEE DESCRIPTION	STB EP 542 (Sub-No. 1)		STB EP 542 (Sub-No. 2)		STB EP 542 (Sub-No. 3)		Diff.	Percent change
	Current fee		New Fee		New Fee			
	Item	Amount	Item	Amount	Item	Amount		
COMPLAINT OR PETITION REQUESTING INVESTIGATION	57.0	5,200	57.0	5,700	57.0	5,800	600	11.54
PETITION FOR DECLARATORY ORDER—EXISTING RATE	58.1	1,000	58.1	1,000	58.1	1,000	.....	.....
PETITION FOR DECLARATORY ORDER—ALL OTHERS	58.2	1,400	58.2	1,400	58.2	1,400	.....	.....
APPLIC. FOR SHIPPER ANTITRUST IMMUNITY	59.0	4,200	59.0	4,500	59.0	4,600	400	9.52
LABOR ARBITRATION APPEAL REVIEWS	60.0	150	60.0	150	60.0	150	.....	.....
APPEALS TO STB DECISION OR PETITION REVOKE EXEMPTION	61.0	150	61.0	150	61.0	150	.....	.....
MOTOR CARRIER UNDERCHARGE PROCEEDING	62.0	150	62.0	150	62.0	150	.....	.....
APPLIC.—AUTHORITY RELEASED VALUE RATES	76.0	700	76.0	800	76.0	800	100	14.29
APPL. SPECIAL PERMITS SHORT NOTICE OR WAIVER	77.0	70	77.0	80	77.0	80	10	14.29
TARIFFS, INCL. SUPPLEMENTS AND CONTRACT SUMMARY	78.1	14	78.1	16	78.1	16	2	14.29
TARIFFS SUBMITTED BY FAX	78.2	1	78.2	1	78.2	1	.....	.....
SPECIAL DOCKET APPL. INVOL. $25,000 OR LESS	79.1	45	79.1	50	79.1	50	5	11.11
SPECIAL DOCKET APPL. INVOL. OVER $25,000	79.2	90	79.2	100	79.2	100	10	11.11
INFORMAL COMPLAINTS ABOUT RAIL APPLICATION	80.0	350	80.0	350	80.0	400	50	14.29
TARIFF RECONCILIATION PET. MC $25,000 OR LESS	81.1	45	81.1	50	81.1	50	5	11.11
TARIFF RECONCILIATION PET. MC OVER $25,000	81.2	90	81.2	100	81.2	100	10	11.11
REQUEST AVAILABILITY OR REASONABLE MC RATES	82.0	100	82	150	82.0	150	50	50
FILING OF DOCUMENTS FOR RECORDATION	83.0	24	83.0	26	83.0	26	2	8.33
INFORMAL OPINIONS RATE APPL.—ALL MODES	84.0	150	84.0	150	84	150	.....	.....
RAILROAD ACCOUNTING INTERPRETATION	85.0	650	85.0	700	85.0	700	50	7.69
AN OPERATIONAL INTERPRETATION	86.0	850	86.0	950	86.0	950	100	11.76
ARBITRATION COMPLAINT	(1)	(1)	87.1	75	87.1	75	.....	.....
ARBITRATION COMPLAINT ANSWER	(1)	(1)	87.2	75	87.2	75	.....	.....
ARBITRATION 3RD PARTY COMPLAINT	(1)	(1)	87.3	75	87.3	75	.....	.....
ARBITRATION 3RD PARTY COMPL. ANSWER	(1)	(1)	87.4	75	87.4	75	.....	.....
ARBITRATION APPEAL	(1)	(1)	87.5	150	87.5	150	.....	.....
MESSENGER DELIVERY OF DECISION—RR AGENT	96.0	19	96.0	20	96.0	21	2	10.53
REQUEST FOR SERVICE FR NOTICE REQUIRED	97.0	14	97.0	15	97.0	16	2	14.29

REQUEST CARLOAD WAYBILL NO FR NOTICE REQUIREMENT	98.1	150	98.1	200	98.1	200	50	33.33
REQUEST FOR SERVICE FR NOTICE REQUIRED	98.2	400	98.2	400	98.2	400	.....	.....
APPLICATION FOR THE STB PRACTIONER'S EXAM	99.1	100	99.1	100	99.1	100	.....	.....
PRACTIONER'S EXAM INFORMATION PACKAGE	99.2	25	99.2	25	99.2	25	.....	.....
URCS—INITIAL PC VERSION PH III SOFT PROGRAM	100.1	50	100.1	50	100.1	50	.....	.....
UPDATED PC VERSION CST FILE, DISK BY REQUEST	100.2	10	100.2	10	100.2	10	.....	.....
UPDATED PC VERSION COST FILE, DISK BY STB	100.3	20	100.3	20	100.3	20	.....	.....
PUBLIC REQUEST FOR SOURCE CODES—PH III	100.4	500	100.4	500	100.4	500	.....	.....
PC VERSION OR MAINFRAME VERS URCS PH II	100.5	400	100.5	400	100.5	400	.....	.....
PC VERSION OR MAINFRAME VERS URCS PH II	100.6	50	100.6	50	100.6	50	.....	.....
PUBLIC REQUEST FOR SOURCE CODES—PH II	100.7	1,500	100.7	1,500	100.7	1,500	.....	.....
REQUESTS FOR PUBLICE USE FILE R-CD FIRST YEAR	101.1	450	101.1	450	101.1	450	.....	.....
REQUESTS FOR PUBLICE USE FILE R-CD ADDITIONAL YEAR	101.2	150	101.2	150	101.2	150	.....	.....
WAYBILL—STB OR STATE PROCEEDING ON R-CD FIRST	101.3	650	101.3	650	101.3	650	.....	.....
WAYBILL—STB OR STATE PROCEEDING ON R-CD DIFF	101.4	450	101.4	450	101.4	450	.....	.....
WAYBILL—STB OR STATE PROCEEDING ON R-CD SAME	101.5	500	101.5	500	101.5	500	.....	.....
USER GUIDE LATEST AVAILABLE CARLOAD WAYBILL	101.6	50	101.6	50	101.6	50	.....	.....
CERTIFICATE OF THE SECRETARY	102.0	10	102.0	11	102.0	11	1	10.00
EXAMINATION OF TARIFFS OR SCHEDULES—CERTIFICATION	103.0	25	103.0	25	103.0	26	1	4.00
CHECKING RECORDS TO CERTIFY AUTHENTICITY	104.0	17	104.0	17	104.0	18	1	5.88
ELECTROSTATIC COPIES TARIFFS, REPORTS, ETC	105.0	5	105.0	5	105.0	5	.....	.....
SEARCH AND COPY SERVICES ADP PROCESS	106.0	44	106.0	45	106.0	46	2	4.55

[1] Not applicable in that year.

STAFFING AND RETIREMENTS

Question. The STB has requested an increase of 3 FTEs for fiscal year 2001, from 140 to 143. Do you plan to bring on 6 new position for one-half year each, or to hire 3 new people at the beginning of the fiscal year? What workload increases are anticipated that would necessitate increases in the Office of Compliance and Enforcement? Please list the job title, salary, and general responsibilities of each proposed new position.

Answer. The Board is currently recruiting for 7 new entry-, mid-, and senior-level professional staff essentially to replace scheduled employee retirements within the next few years. Two of the recruiting actions are for Attorneys, with target grades of GS–15 (entry salary $84,638), who would be involved in trial litigation in defense of the Board's decisions in the courts and in analyzing rail filings involving rail operations and compliance actions. Three of the recruiting actions are for Transportation Industry Analysts, with target grades of GS 13–14 (entry salary $42,724–$71,954), who would be involved in monitoring rail operations, preparing rail analyses, and reporting on rail operations and changes in carriers' practices. The Environmental Protection Specialist position being recruited for, with a target grade of GS–13 (entry salary $60,890), would analyze and report on the various environmental issues related to rail abandonment, rails-to-trail, and construction filings; carrier consolidations; and other filings involving rail operations impacting the environment. The clerical recruitment of a Welfare-to-Work employee, with a target grade of GS 4–5 (entry salary $20,829–$23,304), would provide clerical support in the rail operations and compliance area.

Question. The STB has stated that a large number of current Board employees are already eligible to retire under current regulations and that an even larger number of employees will become retirement eligible within the next two to three years. How many STB employees retired in fiscal years 1998 and 1999, and have retired or are planning to retire in fiscal year 2000? How many employees will be retirement eligible in fiscal year 2001? Please express the actual and potential attrition rates for each of the years listed as a percentage of on-board staff.

Answer. Between April 1, 2000 and September 30, 2002, 34.3 percent of the Board's employees are eligible for voluntary retirement. There were 2 retirements during fiscal year 1998, 2 retirements during fiscal year 1999, and 7 actual and planned retirements during fiscal year 2000. The following table reflects the retirement eligibility of Board employees.

Retirement eligible by fiscal year	Number of employees eligible	Percentage of staff eligible to total staffing
09/30/2000	27	19.7
09/30/2001	33	24.1
09/30/2002	47	34.3
09/30/2003	61	44.5
09/30/2004	73	53.3
09/30/2005	84	61.3
09/30/2006	88	64.2
09/30/2007	97	70.8
09/30/2008	101	73.7
09/30/2009	108	78.8
09/30/2010	109	79.6

FISCAL YEAR 2001 BUDGET REQUEST

Question. The Board's fiscal year 2001 request is for $17,954,000, $954,000 more than the enacted fiscal year 2000 level of $17,000,000. Please detail how much of the personnel-related increases are associated with: the increased fiscal year 2000 pay raise, inflation and the 3.7 percent fiscal year 2001 civilian pay raise, and personnel costs for the 3 new FTEs that the Board plans to hire?

Answer. The following table provides a crosswalk from the enacted fiscal year 2000 level of $17,000,000 to the fiscal year 2001 request of $17,954,000.

Fiscal Year 2000 Enacted Appropriation	$17,000,000
Annualization of Fiscal Year 2000 Pay Raise	132,000
Fiscal Year 2001 3.7 percent Pay Raise	390,000
Mandatory Fiscal Year 2001 Within Grade Increases	33,000

New Compliance/Operations Staffing—3 FTEs	140,000
Non-Pay Inflation and GSA Rent Increase	115,000
Records Storage (Federal Records Center)	80,000
Technical Systems Support	55,000
Fiscal Year 2001 Budget Request	17,954,000

Question. Please describe the Board's use of reimbursable personnel. What positions are currently being held by reimbursable personnel? What are the advantages to using reimbursable personnel? How do the salaries and benefits costs for reimbursables compare to on-board FTE costs?

Answer. Federal agencies must account to OMB for all FTEs funded by direct appropriation (direct FTEs) and by reimbursable funds from other agencies or offsetting collections (reimbursable FTEs). The Board has permanent on-board employees funded by both direct appropriation and reimbursable or offsetting collections. The number of on-board reimbursable FTEs in a fiscal year is directly determined by the amount of offsetting collections received by the Board in any given fiscal year. The Board also has one employee who provides some services to another branch of DOT and for which the Board is reimbursed.

In addition, the Board pays for certain administrative services provided by other agencies. For example, the Board pays the Environmental Protection Agency to provide payroll services, and the Federal Transit Administration to provide accounting services. The costs of performing these services in-house or reimbursing another entity are comparable.

MONITORING OF DECISION IMPLEMENTATION

Question. Please describe how the Board monitors the implementation of rulemaking decisions and private sector initiatives and agreements that reflect Board directives.

Answer. The Board monitors its decisions and directives in various ways. In major mergers or consolidations of rail carriers, the Board normally provides for an oversight period, which generally extends for 5-years. The agency retains jurisdiction during that time to impose new conditions on the merger or to take other actions that might be needed to protect the public. With regard to rulemakings, after the Board issues a decision in a rulemaking proceeding, questions about implementation of the Board's decision are generally raised and addressed in the context of a declaratory order or complaint that is filed.

The Board encourages private-sector initiatives. The Board particularly encourages parties to attempt to resolve their differences by private-sector agreements and can put the force of law behind them. When negotiations are successful and the parties reach agreements in the context of a rail merger proceeding, for example, the agreements themselves are often imposed as conditions to merger approval or the agreements form the basis for other conditions imposed by the Board. If problems or disagreements arise later, parties may seek to have the Board enforce agreements to the extent that they have been imposed by the Board as conditions or requirements. Sometimes the Board strongly urges that a private-sector deal be reached and then indicates that it will monitor its implementation. In this instance, the Board can make the agreement a more formalized requirement if the need arises.

PUBLIC HEARINGS ON MAJOR RAIL CONSOLIDATIONS

Question. Please summarize the findings of the Board's March 2000 public hearings on major rail consolidations and the present and future structure of the North American rail industry.

Answer. Given the prospect of significant further consolidation within the rail industry, and our concern that the railroad industry and the shipping public have not yet recovered from the service disruptions associated with the previous round of mergers, the Board instituted the STB Ex Parte No. 582 proceeding to obtain public views on the subject of major rail consolidations and the present and future structure of the North American rail industry. As part of this proceeding, the Board took written and oral testimony from all sectors associated with the rail industry: large and small rail carriers; large and small shippers representing various commodity groups; intermodal and third party transportation providers; rail employees; state and local interests; financial analysts and economists; and Members of Congress and other federal agencies.

As a result of the hearing in STB Ex Parte No. 582, the Board issued a decision served on March 17, 2000, finding that the overwhelming weight of the testimony was that, at a minimum, the Board's rail merger policy must be reexamined now,

before any new major mergers are processed. Through that decision, the Board announced a suspension for 15 months of all new rail merger activity before the Board and that, over that 15-month period, it would initiate and complete a proceeding that will provide new merger rules. In a decision served on March 31, 2000 (and published in the Federal Register on April 6, 2000) in STB Ex Parte No. 582 (Sub-No. 1), the Board issued an advance notice of proposed rulemaking seeking comment on various proposed changes to the Board's rail merger rules. The Board expects to complete the rulemaking process by issuing final revised rail merger rules by mid-June 2001. Please see the attached decisions in the STB Ex Parte No. 582 lead proceeding and the (Sub-No. 1) rulemaking proceeding.

RAIL MERGER POLICY DECISION

Question. Please summarize the Board's rationale for its decision to suspend all major merger activity for 15 months (effective March 16, 2000). Justification.

Answer. As indicated already, in a decision served on March 17, 2000, in STB Ex Parte No. 582, the Board found that the overwhelming weight of the testimony was that, at a minimum, the Board's rail merger policy must be reexamined now before any new major mergers are processed. The Board concluded that the rail community is not in a position to undertake what will likely be the final round of restructuring of the North American railroad industry, and that the current rules are simply not appropriate for addressing the broad concerns associated with reviewing business deals geared to produce two transcontinental railroads. To permit the development of the new rules, and to ensure that the industry has had the opportunity to fully recover from service problems associated with recent mergers without distractions associated with consideration of additional mergers, the Board ordered a suspension of all merger activity, categorized as major transactions, until after the final merger rules are issued, or a total period of 15 months.

The Board stated that, not only would it be impracticable to try to act on a final round of mergers while in the process of developing new merger rules, but it would also be disruptive to the rail system and to rail service that remains below acceptable levels in many areas. Carriers whose management should be focused on fixing their service problems would instead be fixated on finding merger partners, defending their proposals, and responding in the regulatory arena to other carriers' proposals. Investors, who have forsaken the railroad industry in favor of businesses that they have come to believe may have more favorable future prospects, could devalue the industry further. And railroads could find it more difficult to finance the capital improvements necessary to provide the better service that is key to their financial revitalization. The disruption would go far beyond the specific interests of Burlington Northern Santa Fe and Canadian National and the carriers that compete with them; it could irreparably damage the entire industry, to the detriment of the interests of shippers, rail employees, and the national economy and defense.

The Board believes that the sheer size of the potential new mergers poses unique risks and leaves no margin for error: if these mergers were to fail, or lead to service problems, the effects could be devastating for both the rail industry and the shippers that depend on rail service. During the process of reexamining the merger rules and making sure that the new merger rules take such risks into account, the Board believes it necessary to maintain the status quo by directing large railroads to suspend merger activity pending the development of the new merger rules.

Question. Burlington Northern and Santa Fe Railway Company and Canadian National Railway Company have filed an appeal with the D.C. Circuit Court of Appeals of the STB's 15-month merger moratorium. What is the schedule for a hearing and decision on this appeal?

Answer. The petitions for review were filed in court on March 17, 2000, and March 20, 2000. On March 29, 2000, petitioners Burlington Northern Santa Fe Corporation and The Burlington Northern and Santa Fe Railway Company filed with the court a motion to expedite judicial review, under which briefing would be completed approximately one month after the court rules on the motion, and under which oral argument would be held as soon thereafter as possible. On April 11, 2000, Canadian National Railway Company filed a similar motion. The court has not yet ruled on the motions, and thus a briefing schedule has not yet been set.

DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2001

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

[CLERK'S NOTE.—The following testimonies were received by the Subcommittee on Transportation and Related Agencies for inclusion in the record. The submitted materials relate to the fiscal year 2001 budget request.

The subcommittee requested that public witnesses provide written testimony because, given the Senate schedule and the number of subcommittee hearings with Department witnesses, there was not enough time to schedule hearings for nondepartmental witnesses.

NONDEPARTMENTAL WITNESSES

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

PREPARED STATEMENT OF THE COMCARE ALLIANCE

I thank you for the opportunity to provide testimony to your subcommittee on behalf the ComCARE Alliance for the record. ComCARE is a non-profit coalition of more than 50 organizations who are dedicated to building an end-to-end system to enhance public safety utilizing wireless technologies.

Over the past decade, we have seen enormous advancements in the fields of transportation, public safety, communications and EMS. Unfortunately, many of these advancements have occurred on their own and have not been integrated with one another. The ComCARE Alliance is working across America to link technologies to complete a "chain of survival" that will save lives, reduce the impact of debilitating injuries, conserve resources, and improve the efficiency of our nation's highways. Wireless communications is the critical link in this chain. Last year, with the help of Commerce Committee Communications Subcommittee Chairman Burns, and other leaders like Senators Lott, Dorgan, Frist and others, The Wireless Communications & Public Safety Act of 1999 was enacted into law, removing several of the barriers to deploying these lifesaving technologies.

My testimony focuses on two central themes that describe how connecting wireless to transportation, public safety and EMS functions, gives the term "integration" a new meaning. The same communications technologies that are used to locate emergency calls can be used to identify real-time traffic patterns, pinpoint vehicle crashes, and identify the positions of emergency response vehicles. Unfortunately, no mechanism or process currently exists to bring together each of the critical entities together at the federal or state levels to make integration of all the building blocks a reality. Our program request is modest because we believe there are other sources of funding that can be used for integration purposes. Our goal is to leverage significantly more public and private investment beyond what we are asking from you today.

The ComCARE Alliance respectfully requests that this subcommittee appropriate resources for two specific activities. These initiatives will contribute to reducing highway fatalities and injuries, and they will have significant benefits for other

transportation objectives (e.g. quality and efficiency). Our first request to you Mr. Chairman and members of the Subcommittee is to advance trauma research, private sector initiatives, and public understanding of automatic crash notification (ACN). ACN technologies link crash sensors in equipped vehicles to a wireless telephone. In the event of a crash, an emergency call is automatically generated, opening voice communications and sending crash data to help response agencies in deciding what assistance needs to be dispatched to the scene. We request that $5–$10 million be included in the fiscal year 2001 Transportation Appropriations bill to support national ACN field testing. Research would be conducted by trauma centers in geographically diverse areas across the country. Trauma centers will partner with other entities to conduct data analysis and crash investigations.

Second, we respectfully request that Congress accelerate the process of deploying integrated emergency communications and transportation systems by launching a national and state-level dialogue on the importance of integration. This will include both incentive grants to states to conduct statewide planning and model deployments, and a grant for a national educational effort with key stakeholder groups. The National Communications & Public Education Program will organize a national "summit meeting" to educate leaders of the various constituency groups (Intelligent Transportation, Traffic Engineers, EMS, 9–1–1, Wireless Carriers) about the value of working together at the state and local levels to enhance public safety and improve transportation efficiency. We request that Congress appropriate $11.5 million for the State Planning Grant Program and the National Dialogue in fiscal year 2001. $10 million would be distributed to states to pay for an inclusive, coordinated planning and implementation process, and for specific deployment costs (any part of the end-to-end system). $1.5 million would fund a two year public education program in conjunction with state planning activities described above. Since this is not a function that the U.S. Department of Transportation currently performs, resources to support this "national dialogue" program should not be diverted from existing program funds. New resources need to be directed for this important effort.

We are presented with an opportunity to work together to upgrade our transportation systems, improve public safety and save lives on America's roadways. The members of the ComCARE Alliance are dedicated to working together with you and your colleagues to build these end-to-end systems across the country.

I thank you for the opportunity to submit testimony for the record. I am honored to represent the ComCARE Alliance. ComCARE is a non-profit coalition of more than 50 organizations including nurses, physicians, transportation officials, emergency medical technicians, 9–1–1 directors, wireless companies, public safety and health officials, law enforcement groups, automobile and technology companies, telematics suppliers, safety groups, and others who are dedicated to building an end-to-end system to enhance public safety utilizing wireless technologies.

Over the past decade, we have seen enormous advancements in the fields of transportation, public safety, communications and EMS. Unfortunately, many of these advancements have occurred on their own and have not been integrated with one another. The ComCARE Alliance is working across America to link technologies to complete a "chain of survival" that will save lives, reduce the impact of debilitating injuries, conserve resources, and improve the efficiency of our nation's highways. Wireless communications is the critical link in this chain.

Last year, with the help of Senator Burns, and other leaders like Senators Lott, Dorgan and Frist, the Wireless Communications and Public Safety Act of 1999 was enacted into law. That Act made "9–1–1" the official number for emergencies across America, reduced barriers to installing lifesaving wireless location technologies, and encouraged the FCC to help get all the right groups get around the table to plan and upgrade 21st century safety systems.

VISION OF INTEGRATED TRANSPORTATION AND EMERGENCY COMMUNICATIONS

Assume for a moment that there was a serious three-car pile-up on I–65, just north of Birmingham, AL, normally a 20-minute ambulance ride to the closest emergency care facility under rush-hour conditions. It's even farther to the advanced care trauma center. During this crash, several of the passengers suffered significant injuries.

In this integrated illustration, an Automatic Crash Notification device located in each of the impacted vehicles would be activated. A wireless emergency call would automatically be dialed and the crash data, how fast the cars were traveling, the principal direction of force, whether the cars rolled over, and the type of cars in the crash would be simultaneously sent to the 9–1–1 center and the nearest trauma center (the latter because data indicated a very serious crash). The 9–1–1 dispatchers would know the exact location of the crash since as it was instantly plotted

on a computerized map in front of them. They would also know that Good Samaritans passing by the incident on I–65 and dialing 9–1–1 on their wireless phones were describing the same emergency scene.

Based on the severity of the crash data, the trauma center and 9–1–1 operator would know immediately whether only to send a patrol car, two ambulances, or a Medi-Vac helicopter to UAB Medical Center. On the same map identifying the location of the victims, the emergency dispatcher would also be able to tell where the nearest police cars were patrolling and where the closest ambulances and fire trucks were currently located, using inexpensive AVL technology. To get a better view, the nearest ITS-deployed camera, identified by this same location data, would automatically be switched on and focused on the crash scene. As EMS arrived on the scene and took the victims to the trauma center (avoiding other tie-ups due to the dispatcher's access to traffic data), the trauma teams would be getting prepared, knowing from the crash data the specific kinds of internal and external injuries that they should expect to treat.

Due to the integration of emergency communications with traffic management, the same location technology would provide traffic managers real-time descriptions of traffic patterns and speeds, and the crash would be immediately reported, along with its effect on traffic. This would allow diversion of traffic, saving time for other commuters heading home to their families and immediate dispatch of equipment to clear the highway. Wireless subscribers to traffic data services and heading towards the incident would have instant access to the clogged traffic situation ahead and be offered alternative routes. The same picture would appear graphically via an Internet delivered service to subscribers and any government official who was given access.

Inside the ambulance, devices would be hooked up to the victims, communicating vital signs in real-time via wireless to the trauma center. Each victim's medical history, blood type, and reactions to medication would also be accessed from a secure database to better prepare caregivers. And on the way to the trauma center, the ambulances would not see a red traffic light, and would be routed along highways with the least amount of congestion.

In addition to saving lives, the trauma center and medical networks might be able to reduce their treatment and insurance costs by providing assistance to these patients in a much shorter time, before they sustained long-term debilitating injuries, and they would be looking for internal injuries that were often missed before.

Unfortunately, no mechanism or process currently exists to bring each of the critical entities together at the federal or state levels to make this picture a reality. At the end of the day, a stronger focus on integration will help get comprehensive systems deployed much, much faster, and also ones that are more efficient and valued by end users.

THE NEED FOR INTEGRATING FUNCTIONS

ComCARE's testimony focuses on two central themes, and outlines a modest program for your Subcommittee to consider. It would leverage significant private and state resources to make these end-to-end systems a reality. Last year's 9–1–1 bill focused on removing barriers to lifesaving technologies. ComCARE's membership recognizes that deployments of these technologies will have enormous transportation benefits.

Mobile Integration

The first theme is that much more integration is possible in a mobile society than ever before. The advent of the wireless phone and ubiquity of mobile communications networks have brought about a significant potential for extending transportation, public safety and medical efficiencies to a traveling public.

More than 85 million wireless phones are used more than 100,000 times per day to report vehicle crashes, reduce crimes, and lower response times to emergencies. According to statistics from the National Highway Traffic Safety Administration, since 1988, EMS notification times concerning vehicle crashes have dropped nearly 30 percent in both urban and rural areas, roughly tracking the growth of wireless phone use. Yet, long or delayed response times to crashes or other life-threatening emergencies are still a major public health problem in the United States, especially in rural areas. Our trauma surgeons and emergency physicians know that faster action is critical during the "Golden Hour" following a vehicle crash or other traumatic emergency.

Wireless technologies also have tremendous benefits to the transportation community. Wireless networks that are upgraded with enhanced 9–1–1 (E9–1–1)[1] capabilities for all phones have the potential to improve transportation systems by providing for the provision of real-time traffic information, utilizing aggregate wireless phones as "data probes," and providing a low cost platform for supporting automatic crash notification (ACN) and automatic vehicle location services. They can also be used as an early warning system for traffic incidents. Finally, wireless communications also allow for better sharing of information between each entity in the end-to-end system.

integration of the Building blocks

The second theme is that "integration" is badly needed among the building blocks of the end-to-end system: transportation, public safety and EMS. There are a multitude of federal and state programs that are advancing the effectiveness of each of the individual blocks. However, each program is primarily focused only on one block, rather than seeing each as links in a whole chain. For example, the Federal Communications Commission's Public Safety and Wireless Advisory Committee (PSWAC) is focused on spectrum for law enforcement but not focused on transportation communications. The Department of Justice is making grants for "3–1–1" information systems, but not linking 3–1–1 to 9–1–1. Many states have excellent highway safety and EMS programs, but other states don't know about them. There have been outstanding "pilot projects" in Virginia and across the country demonstrating the availability of real-time traffic information on primary highways, but that data is not being shared with 9–1–1 centers who could better route emergency vehicles. There is not one state which has an official structure where all of the key stakeholders involved with transportation, public safety, and EMS meet to develop integrated policies and systems.

The term "integration" to transportation policymakers means connecting one form of transportation to another form or another technology. Intelligent transportation integration projects often incorporate an advanced technology and ensure that it is compatible with a national "ITS architecture." These efforts are productive and are improving transportation systems. But more can be done to promote true integration in terms of sharing information, getting different agencies and sectors working together, identifying synergies, and deploying technologies for multiple purposes. If you use communications, particularly wireless, to connect transportation, public safety and EMS functions, the term "integration" takes on new meaning. The same communications technologies that are used to locate emergency calls can be used to identify traffic patterns, and keep tabs on emergency response vehicles or trucking fleets. The opportunity to improve transportation efficiency, enhance public safety, and save lives stems from the intersection of transportation and emergency communications.

REQUESTED APPROPRIATIONS

The ComCARE Alliance respectfully requests that this committee appropriate resources for two specific activities. These initiatives will contribute to reducing highway fatalities and injuries, and they will have significant benefits for other transportation objectives (e.g. quality and efficiency).

Our goal is to leverage significantly more investment beyond what we are asking from you today. Our program request is modest because we believe there are other sources of funding that can be used for integrated purposes. The value of the funds we request today is that they will encourage and leverage these other investments. Specifically these others include 1) ITS deployment funds; 2) existing federal and state transportation programs; and 3) the private sector.

We respectfully suggest you compliment the U.S. Department of Transportation for its efforts to date in the following two areas, and encourage it to do more of these activities from existing funds, as well as the new funds we request today.

Automatic Crash Notification Research

Our first request to you Mr. Chairman and members of the Subcommittee is to advance trauma research, private sector initiatives, and public understanding of automatic crash notification (ACN). ACN technologies link crash sensors in equipped vehicles to a wireless telephone. In the event of a crash, an emergency call

[1] "E9–1–1" refers to wireless Enhanced 9–1–1; FCC Report and Order 94–102 requires wireless carriers to provide a callback number and location of emergency callers to Public Safety Answering Points on a phased in basis. Federal Communications Commission. Revision of Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems. CC Docket No. 94–102. RM–8143.

is automatically generated, opening voice communications and sending crash data to assist response agencies in deciding what assistance needs to be dispatched to the scene. Crash data, such as speed of the crash, airbag deployment, point of impact, and seatbelt use is extremely helpful to trauma and emergency medical experts in predicting the severity and type of injuries sustained in the crash. With serious field research based on significant units, we can develop powerful and accurate predictive capabilities.

Currently, U.S. DOT is conducting very limited field testing of ACN technologies in two locations (Buffalo, New York and Rochester, Minnesota) with only a few hundred vehicles. DOT and one of its contractors are paying all the costs, including vehicle equipment. While this research has demonstrated that the technology works and it can be invaluable to emergency response, the number of units in the field does not even begin to approach the number necessary to generate sufficient crash data to verify predictions with actual patient outcomes. Significant national testing is needed incorporating crash data from a statistically significant number of vehicles, and exposing ACN use in both urban and rural settings.

We request that $5–$10 million be included in the fiscal year 2001 Transportation Appropriations bill to support national ACN field testing. Research would be conducted by trauma centers in geographically diverse areas across the country. Trauma centers will partner with other entities to conduct data analysis and crash investigations.

ACN field testing would take two basic forms: (a) a national test with crash data collected from the vehicles of one or more auto manufacturers, and/or a retrofit company, and (b) a number of market specific tests in a city or region. In-vehicle equipment would be provided by commercial entities. Grant funds would be used for medical and engineering field research and for establishing information distribution systems among public safety and EMS entities and other government agencies.

National Dialogue and State Planning Grants for Integrated Transportation and Emergency Communications

Second, we respectfully request that Congress accelerate the process of deploying integrated emergency communications and transportation systems by launching a national and state-level dialogue on the importance of integration. This will include both incentive grants to states to conduct statewide planning and model deployments, and a grant for a national educational effort with key stakeholder groups.

Federal, state and local governments have spent significant sums on transportation and emergency communications in recent years, but no state has fully integrated these systems to improve public safety. Most agencies need upgrades (e.g. to provide E9–1–1) and/or more broad deployments (e.g. to provide more comprehensive traffic data). More effectively linking some of the functions of these agencies at the state and local level will save resources.

Because service areas of some of the providers (e.g. wireless carriers) are state and regional, upgrade planning on a purely local basis will not work. Governors need to bring together the key stakeholders to develop and implement coordinated, efficient plans for upgrading wireless emergency communications (E9–1–1), and integrating that with transportation policies (e.g. traffic control and congestion operations). This will serve both efficiency and safety goals.

In addition to planning, grants could be also used by states, in their discretion, for completing any part of the chain of survival. These activities include traffic reporting systems using 9–1–1 location technology; upgrade of local 9–1–1 systems and networks to produce and receive location of wireless 9–1–1 callers; integration with ITS capabilities; and other pre-hospital emergency needs of states.

In addition, a National Communications & Public Education Program is needed to support this state planning. The process of integrating transportation, E9–1–1 and EMS systems will require leadership and participation from members of the transportation, emergency medical, consumer, and public safety communities. Traditionally these groups have seldom worked with each other, and they have not considered integrating communications technologies that can improve the way they handle their respective responsibilities. To show stakeholders around the country what they can do to build an end-to-end system in their area, a national communications and public education program should be established. The ComCARE Alliance and its member ITS America have already begun this activity, but it needs to be expanded significantly.

This program would include: conferences of national, regional and local stakeholder group leaders; workshops to discuss how federal, state, and local funding sources can leverage private funds to pay for infrastructure and staffing costs; research papers on deployment topics and sharing of "best practices;" technology demonstrations; and the development of materials that can be distributed to state and

local agencies, citizen groups and the media about the public safety and transportation benefits.

To date, there is no federal or state program designed to bring these different functions of government together with the private sector and consumer groups to integrate their efforts in transportation and emergency communications. For example, there is no table where the 9–1–1 community, the Department of Transportation, the American Heart Association, and the Brain Injury Association come together to coordinate their efforts to develop emergency transportation systems. If local and state agencies and others work together to incorporate advances in transportation and communications technologies, staff and financial resources will be maximized and systems will be more efficient.

The National Communications & Public Education Program will organize a national "summit meeting" to educate leaders of the various constituency groups (Intelligent Transportation, traffic engineers, EMS, 9–1–1, wireless carriers) about the value of working together at the state and local levels to enhance public safety and improve transportation efficiency. The summit will also include technology demonstrations. Following the summit, the Program will facilitate working groups in 15–20 states to tailor integration models to meet each state's needs. These sessions will bring together all of the local stakeholder groups to determine what resources are available, both public and private, to build an integrated system in their state. To demonstrate different approaches, materials will be compiled and circulated after workshops. These will include a "Report on Best Practices" that will include chapters written by state leaders who are heading up deployments.

We request that Congress appropriate $11.5 million for the State Planning Grant Program and the National Dialogue in fiscal year 2001. $10 million would be distributed to states to pay for an inclusive, coordinated planning and implementation process, and for specific deployment costs (any part of the end-to-end system). We estimate this would cover activity in 5–7 states. $1.5 million would fund a two year public education program in conjunction with state planning activities described above. Since this is not a function that the U.S. DOT currently performs, resources to support this "national dialogue" program should not be diverted from existing program funds. New resources need to be directed for this important effort.

Leveraging Existing Integration Resources

The "Intelligent Transportation System Integration Program" at the Department of Transportation's Joint Program Office was created to encourage integration of advanced transportation technologies. This program (Section 5208 of the Transportation Equity Act for the 21st Century) is an appropriate resource for state, county and municipal governments to obtain some resources to support integration deployments. These ITS deployment grants can serve as incentives, or leverage money to help install a communications platform that can serve multiple purposes, with cost savings to all participants.

We encourage communities across the country to use these ITS Integration Deployment grants for the kind of transportation and emergency communications purposes that ComCARE has outlined above. The more places around the country that demonstrate the value of integrating their local 9–1–1, EMS, traffic, and transportation systems, the better. Communities can design specific applications that address their needs such as improved communications and tracking functions for snowplow contractors in the Northeast, or shared traffic data between traffic control centers and EMS units in urban areas. ComCARE members and others should work at the local level to create partnerships that can use these grants to improve public safety.

CONCLUSION

As we begin the Twenty-First century, it is no longer possible to view transportation and emergency communications in separate boxes. Technologies that have emerged in the information age make it possible to integrate these two functions that affect every citizen's life. We are presented with an opportunity to work together to upgrade our transportation systems, improve public safety and save lives on America's roadways. Modest federal support can leverage significant private and local resources to get this done. The members of the ComCARE Alliance are dedicated to working together with you and your colleagues to build these end-to-end systems across the country.

PREPARED STATEMENT OF THE COMMERCIAL VEHICLE SAFETY ALLIANCE

These comments are submitted on behalf of the Commercial Vehicle Safety Alliance, an international organization of truck and bus safety enforcement officials and industry representatives in the U.S., Canada, and Mexico.

With respect to the fiscal year 2001 budget for the Federal Motor Carrier Safety Administration, we suggest two projects for FMCSA that may be eligible for funding under the category of high priority initiatives. The first relates to the CDL program. The second relates to a new requirement in the Motor Carrier Safety Improvement Act of 1999 to certify motor carrier safety auditors.

In the fiscal year 2000 Transportation Appropriations Conference Report, the then Office of Motor Carriers and Highway Safety was directed to work "work with states to assure that they have the most up-to-date driving record for people that hold a commercial driver's license (CDL) and that this information can be easily transferred . . ." Little or no progress has been made in this effort.

In addition, the MCSIA requires States to address current deficiencies in the exchange of information relating to driver violations that would result in either the suspension or revocation of a CDL.

Thus, we recommend that FMCSA place renewed emphasis on the CDL program and establish a pilot CDL compliance program to assist States in determining what is impeding the speed with which driver convictions are entered into the national system (CDLIS) and to further assist States in taking corrective action to remedy the deficiencies.

This pilot program would accomplish these objectives through a cooperative effort between FMCSA and the state MCSAP agencies. Funds should be provided to the State MCSAP agency to obtain whatever resources may be necessary to first determine any deficiencies within its own operations that may contribute to the problem in obtaining and exchanging the necessary driver conviction information but also to enable the MCSAP agency to assist the State Motor Vehicle Licensing Agency and any other state agency, including local law enforcement agencies, in correcting whatever problems that may exist which impede the efficient and timely posting and otherwise necessary flow of driver conviction information through all appropriate channels so that drivers with revoked or suspended licenses may not operate on our highways.

CVSA believes that without new and creative leadership of the leading commercial vehicle safety enforcement agency at the federal level and of the lead MCSAP agency at the state level, the important national safety objective of improving the CDL program will not be realized.

On the issue of certification, the MCSIA requires the Secretary to complete a rulemaking within one year of enactment to improve training and provide for the certification of motor carrier safety auditors, including private contractors, to conduct safety audits. In addition the MCSIA requires that all new motor carrier entrants be reviewed by a safety auditor within 18 months of operation.

CVSA therefore recommends that FMCSA work with those groups and organizations that may already have the experience and expertise in establishing and operating similar certification programs in the vehicle safety area such commercial motor vehicle inspections.

Thank you for the opportunity to provide these comments to the Subcommittee.

RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION

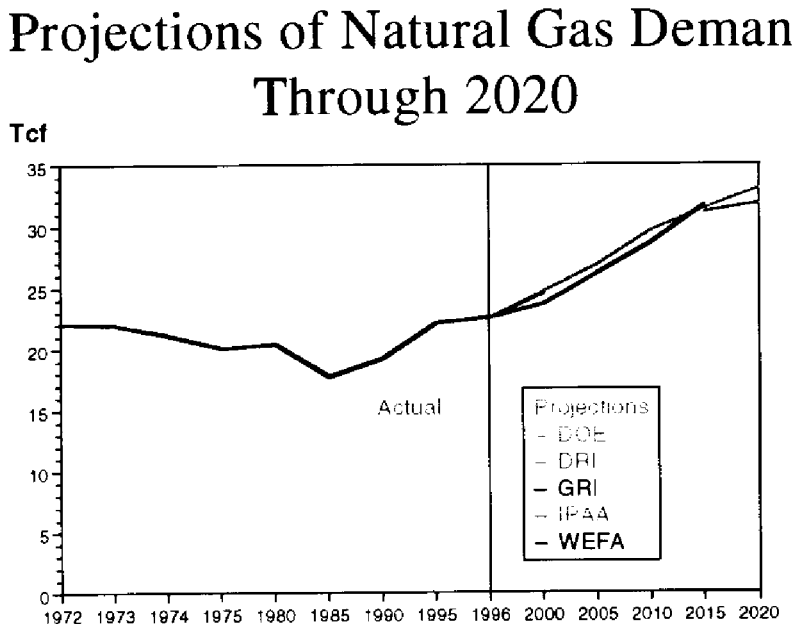
PREPARED STATEMENT OF THE INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA

The Interstate Natural Gas Association of America (INGAA) appreciates the opportunity to share our views on the fiscal year 2001 Transportation Appropriations measure, and in particular, the proposed funding for pipeline safety activities. By way of introduction, INGAA is the trade association that represents virtually all of the interstate natural gas transmission pipeline companies operating in the U.S., as well as comparable companies in Canada and Mexico. Our members transport over 90 percent of the nation's natural gas.

Safety is a primary focus for our member companies. The natural gas pipeline industry is already the safest mode of transportation, according to figures complied by the U.S. Department of Transportation and the National Transportation Safety Board. Although there are over 2 million miles of natural gas and petroleum pipelines in the United States today, accidents are rare.

The reason the industry is so safe is the fact that INGAA's members take safety very seriously. Accidents are few, but the consequences of any accident can be significant. The American economy needs clean, low-cost energy to grow, and natural

gas is an integral part of that growth. Due to its environmental benefits and low cost, most energy analysts foresee a huge increase in the demand for natural gas over the next 20 years for power generation and industrial processes (see below). If our product is somehow viewed as being unsafe, however, the general public will not accept continued pipeline operations and the significant expansions that will be needed to meet this demand.



Interstate natural gas pipelines spend about $600 million annually on safety activities, which is about $3,400 per mile. We employ a variety of techniques, including internal inspection devices (known as smart pigs), hydrostatic testing, cathodic protection (which prevents corrosion), pipeline right-of-way fly-overs and walking inspections, and public awareness and education programs. Interstate natural gas pipelines are also required to upgrade their pipeline as the population density to the pipeline increases. These "class location" changes result in pipelines either changing to a thicker-walled pipe, or lowering the pressure on the line, to increase the margin of safety.

The Office of Pipeline Safety (OPS), which is part of the Research and Special Programs Administration at the U.S. Department of Transportation, is responsible for regulating the safety of interstate natural gas and hazardous liquid pipelines. OPS is funded almost entirely through user fees which transmission pipelines pay based on the miles a pipeline operator owns. Accordingly, INGAA wants to see that the dollars its members pay to fund OPS are used in ways which enhance safety.

INGAA has several concerns about the Administration's proposed budget for OPS. The Administration request would represent an increase of over 21 percent in the total budget for OPS, from $38.879 million in fiscal year 2000 to $47.137 million in fiscal year 2001. This is a significant increase under any circumstances, but it is puzzling given the outstanding safety record of natural gas pipelines and the fact that the number of natural gas transmission accidents has actually decreased, on average, in recent years. INGAA believes OPS should be funded in a manner which allows the current programs to continue.

Regarding INGAA's specific concerns, the Administration request includes sufficient funds to hire four new safety inspectors, although they anticipate using only two new Full Time Equivalents in fiscal year 2001. Since OPS seems to be focusing a great deal of its attention on oil pipelines and improving inspections on those facilities, INGAA believes that the cost associated with these new inspectors should come from the Oil Spill Liability Trust Fund.

Because unintentional "third-party" damage is a leading cause of accidents on natural gas pipelines, INGAA supports the funding for public education and one-call damage prevention programs. We propose that the $500,000 for public education, and the $1,000,000 in state one-call grants, be funded through unexpended reserve account funds. This reserve account consists of pipeline safety user fees which were collected in previous years, but remain unspent in the OPS account. Despite a gradual drawdown of this reserve account in previous fiscal years, the balance is still approximately $18 million, which is much more than is needed for any emergency contingencies.

Although INGAA also supports the state Damage Prevention Grants which were authorized as part of the Transportation Equity Act of the 21st Century (TEA21), we strongly oppose this $5 million allocation being paid through pipeline safety user fees, as the Administration has currently proposed. In fact, the Administration proposal violates Section 6107 of TEA21, which states that "(a)ny sums appropriated under this section shall be derived from general revenues and may not be derived from the amounts collected under section 60301 (user fee section) of this title."

Congress was specific on this point for an important reason. Underground damage prevention is not an issue that is unique to pipelines. In fact, pipelines are affected by only about 17 percent of all one-call center activity, with the remainder coming from such entities as telecommunications, cable TV, electric utilities and water/sewer facilities. Rather than have only pipelines pay to fund grants which benefit a wide variety of industries—as well as the general public—the Congress made it clear that damage prevention grants should come from general revenues. INGAA urges the Subcommittee to reinstate the intent of Congress by allocating the $5 million in one-time damage prevention grants from general revenues.

INGAA is also concerned about the level of proposed funding for state pipeline safety grants. Federal grant funds are made available to those states which adopt federal minimum safety standards for intra-state and local distribution pipelines. Section 60107 of U.S. Code Title 49 states that the Secretary of Transportation "shall pay not more than 50 percent of the cost of the personnel, equipment and activities the (state) authority deems reasonable" in a given calendar year. It is worth noting, however, that the state grants funds are raised from user fees assessed almost exclusively on interstate pipelines, which are regulated by federal rather than state authorities.

In fiscal year 1999, the latest year for which complete figures are available, pipeline safety grants to the states totaled $13 million. This represented 44 percent of total state expenditures for pipeline safety (see attached chart). In other words, state pipeline safety grants have been close to the statutory limit of 50 percent federal funding. However, the states have received federal grant money from other accounts, and have benefited from the assistance of OPS in obtaining new pipeline safety information systems.

The Administration's budget proposes $17.5 million for state grants in fiscal year 2001, up from $13 million in fiscal year 2000. Based upon the 1999 state requests, and factoring in increases for inflation, the fiscal year 2001 total for state grants needed to reach a 50 percent federal contribution should be about $15.7 million. In addition, the Administration request includes $50,000 for state risk management grants, $1 million for state one-call grants, and the aforementioned $5 million for state damage prevention grants. INGAA believes that these grants total far more than the 50 percent cap on federal funding of state programs which is currently in force. The $17.5 million figure, in particular, is too high when you consider that $13 million covered 44 percent of state expenditures for fiscal year 1999. INGAA believes that a far lower state grant number is both appropriate and consistent with the Pipeline Safety Act.

Finally, INGAA takes note of the proposed $250,000 increase in research and development. Our members have participated for several decades in two organizations that seek new technologies to improve pipeline safety—the Gas Research Institute and the Pipeline Research Committee International (PRCI). We would welcome having OPS participate in and contribute funds to PRCI, in order to better coordinate industry and government research on natural gas pipeline safety.

In summary, INGAA believes the proposed budget increase of over 21 percent for the Office of Pipeline Safety is not justified. We support the $5 million in grants to the states for damage prevention, so long as these funds are allocated from general revenues consistent with Congressional intent. INGAA encourages the Subcommittee to draw $1.5 million from the OPS reserve account for public education activities and state one-call grants. As OPS is focusing more of its attention on liquid pipelines in the coming year, we urge any substantive increases in their funding to be drawn from the Oil Spill Liability Trust Fund—not from natural gas trans-

mission pipeline user fees. Thank you for the opportunity to share our views with the Subcommittee.

U.S. COAST GUARD

PREPARED STATEMENT OF THE NATIONAL ASSOCIATION OF STATE BOATING LAW ADMINISTRATORS

Mr. Chairman and Members of the Subcommittee: I am Paul Donheffner, Boating Law Administrator for the State of Oregon and current President of the National Association of State Boating Law Administrators.

The National Association of State Boating Law Administrators (NASBLA) is a professional association consisting of state officials having responsibility for administering and/or enforcing state boating laws.

Our Association is recognized for its stewardship of "Recreational Boating Safety." We have, over the years, worked closely with the U.S. Coast Guard, the States, and others to insure that the intent of Congress to promote uniformity and reciprocity among the various states was given high priority. Testimonial of this are the many standards, resolutions and model acts that have been generated by our Association and adopted by the majority of the states and territories. In doing this we bring to the table highly qualified personnel in the field of boating law enforcement, education, boating safety, and on the water search and rescue.

Our membership takes pride in their accomplishments and the many words of praise we have received from the Commandant, U.S. Coast Guard, and the Chairman, National Transportation Safety Board over the years.

My testimony today will focus on the Aquatic Resources Trust Fund (Wallop-Breaux) and more specific, the Boat Safety Account of this fund.

The boat safety account of the trust fund is derived solely from the tax boaters pay on their motorboat fuel. This user fee paid by the boaters, is returned to the States to help defray their cost for services provided to the recreational boater. We think this is indeed in keeping with the user fee concept, (ie) user pays-user benefits, thus not costing the general tax payer one cent and especially noteworthy, does not add one penny to the national debt. Allowing the States to recoup the federal marine gasoline tax that boaters pay on marine fuel used in motorboats is a prime example of the user fees helping the user.

The National Association of State Boating Law Administrators is asking this Subcommittee for $70 million as authorized in Tea–21, the Transportation Equity Act for the 21st Century for fiscal 2001.

Our Association would emphasize that:

—States make the best use of these trust funds. The end product is a major contribution by the States to maintain an overall reduction in boating fatalities. Since the infusion of federal funds in the 1970s, boating fatalities in the United States have dropped from 1,754 in 1973 to 815 deaths in 1998. This drop occurred despite more people using our waters in a wider diversity of craft than ever before.

—The appropriation of federal assistance to the states from this trust fund has resulted in a willingness on the States' part to assume a major share of what is logically and statutorily a joint responsibility.

—Stability in the appropriation process is very much needed to give the states the credibility, consistency and resources to reach the local boating public.

—The financial base provided by the federal government from this user fee generated trust fund allows the states to concentrate on establishing an administrative infrastructure, purchasing equipment and promoting education and enforcement techniques to stimulate increased boating awareness and decrease fatalities.

—The efforts of the states funded from this user fee generated trust fund should result in savings to the federal government rather than additional cost resulting from state curtailment, inaction or indifference.

—The States willingly picked up the additional responsibility when the Coast Guard removed their boating safety detachment teams some years ago for a savings to the federal government of $10 million plus.

—The States have shown credibility, consistency and resources to reach the boating public with a positive boating safety program directed to make our waterways safer and the boaters experience more enjoyable.

There is no question that state program interventions, made possible with federal funds, are making a difference. Since 1973, when the program began, the Coast Guard estimates that over 23,000 lives have been saved. With full funding we will

strive to keep up with the ever increasing demand to better educate the boaters and further reduce boating accidents and fatalities. The burden for boating safety has shifted from the U.S. Coast Guard to the states, but this would not be possible without federal assistance. We see the states being asked to take an even greater lead role in boating safety, education and boating law enforcement.

Congress is sometimes concerned over the use and effectiveness of these trust funds. Following is a comprehensive listing of how states use Federal Boat Safety Trust Funds:

—Develop new laws and regulations addressing key recommendations by the National Transportation Safety Board in such areas as:
  —Boating while intoxicated.
  —Mandatory wear of life jackets by children
  —Mandatory education and boat operator proficiency
  —Personal watercraft safety
—Increase boating safety patrols.
—Conduct better boating accident investigations. By better understanding accident causes, law enforcement and educational programs can effectively address them.
—Increase enforcement officer training.
—Purchase better communications and enforcement equipment.
—Reach more boaters with free education classes.
—Study the effects of alcohol and boating.
—Construct kiosks to provide boaters information on coastal bar crossings, navigation, equipment requirements, rules of the road and related information including charts.
—Provide weatherproof signage with boater safety information at boat launching ramps.
—Erect wind warning strobe lights across heavily used bodies of water to warn boaters of impending high winds.
—Conduct courtesy boat safety inspections.
—Conduct boating surveys, which provide critical data for assessing boat use, conflict areas and safety courses.
—Distribute free literature on boat noise, sailboarding safety, commercial vessel right-of-way, hypothermia, pleasure craft, use of life jackets (PFD's) and alcohol use.
—Create internet web sites with facilities access, rules, regulations, news, safety, funding, fees, boating and alcohol and other information.
—Mark hazards to recreational vessels.
—Develop school video curriculums and aids.
—Process regatta permits. Some states now process all such permits, completely relieving the Coast Guard of this responsibility.
—Provide boating safety services. States picked up the full responsibility for boating safety after the Coast Guard removed their Boating Safety Detachment Teams (BOSDET) from joint jurisdictional waters.
—Develop and make available boating safety home study courses.
—Develop and place boating information displays at marine dealers.
—Develop coloring books for elementary schools.
—Increase TV and radio public service announcements.
—Implement boating-while-intoxicated program, including purchase of portable testers, training classes and public awareness announcements.
—Computerize boat accident information and arrests, allowing states to respond to public, legislative and other inquiries regarding boating accident and water fatality statistics.
—Improve the integrity of boat registration systems.
—Expand our boating safety education capabilities.
—Purchase special search and rescue boats that are fully equipped for marine law enforcement.
—Add additional full-time and part-time marine patrol officers and boating safety educators.
—Implement special boating investigation teams to handle boat accident investigations.
—Improve cooperation with volunteer groups such as the U.S. Coast Guard Auxiliary by providing boat dock space, communication stations, phone, utilities, etc. This has resulted in much more visibility of search and rescue units and free boat safety inspections.
—Bring together federal, state and local authorities in the interest of boating safety, law enforcement, training and equipment needs.

—Coordinate better with local governments to establish boating restricted zones in heavy activity areas that present safety hazards to the boating public.
—Update film and video libraries with additional programs and equipment to provide to the general boating community and to maintain literature dealing with safety equipment regulations, safe boating information, registration, titling and numbering requirements for statewide distribution. Make products visible and readily available to the boating public.
—Improve communications system to provide for better and extended coverage with waterway enforcement officers. The result is improved response time to marine emergencies and provides greater officer protection.
—Establish new aids to navigation and regulatory marker system for controlled areas.
—Construct and repair boat access ramps.
—Inaugurate programs designed to prevent boating accidents by reaching new generations of recreational boaters in the public schools.
—Implement the Boating Accident Report Data Base (BARD) Electronic Data Transfer Program.

Our joint efforts are paying off. We believe the Administration, Congress, State Legislators and most of all, the boating public that we serve, should recognize the benefits and dividends that are made possible with federal boating safety funds.

In summary Mr. Chairman, We appreciate your continuing support and again ask for your consideration for full funding of $70 million as authorized in TEA–21 for the states boating safety program for fiscal 2001.

Thank you.

PREPARED STATEMENT OF THE UPPER MISSISSIPPI RIVER BASIN ASSOCIATION

The Upper Mississippi River Basin Association (UMRBA) is the organization created 19 years ago by the Governors of Illinois, Iowa, Minnesota, Missouri, and Wisconsin to serve as a forum for coordinating the five states' river-related programs and policies and for collaborating with federal agencies on regional water resource issues. As such, the UMRBA has an interest in the budget for the U.S. Coast Guard.

Though perhaps best known for its important work in coastal waters and on the Great Lakes, the Coast Guard also provides essential services on the nation's inland rivers. Nowhere are these services more important than on the Upper Mississippi River System, which Congress has designated as a nationally significant commercial navigation system and a nationally significant ecosystem. The Coast Guard helps to ensure that the river can continue to serve both of these important functions.

Of particular concern to the UMRBA is funding for the Coast Guard's Operating Expenses account. The President's fiscal year 2001 budget proposal includes $3.199 billion for this account, an increase of nine percent from the fiscal year 2000 enacted level. The Operating Expenses account funds activities that are critical to the safe, efficient operation of the Upper Mississippi River and the rest of the inland river system, including aids to navigation, marine safety, and marine environmental protection. Through these missions, the Coast Guard maintains navigation channel markers, regulates a wide range of commercial vessels in the interest of crew and public safety, and responds to spills and other incidents. In calendar year 1999, the Coast Guard's Upper Mississippi River System units inspected 644 vessels; responded to 100 oil spills; and managed 401 other reportable marine casualties, including groundings, injuries, and vessel breakaways. These numbers speak to the Coast Guard's vital role in establishing and enforcing standards, maintaining navigation aids, and responding to various incidents. The beneficiaries include not only commercial vessel operators, but also recreational boaters; farmers and others who ship materials by barge; and the region's citizens, who benefit enormously from the river as a nationally significant economic and environmental resource.

Recent years have brought a number of changes to the way the Coast Guard operates on the inland river system, including elimination of the Second District; closure of the Director of Western Rivers Office; decommissioning the Sumac, the largest buoy tender on the Upper Mississippi River; and staff reductions. The states understand that these decisions have been driven by the need for the Coast Guard to operate as efficiently as possible, and the states support that goal. However, such changes must be carefully considered and their effects monitored. The UMRBA is increasingly concerned that staff reductions have impaired the Coast Guard's ability to serve as an effective, proactive partner. The individuals serving in the Coast Guard are dedicated, hardworking people; but they are spread too thinly. Important regional initiatives are being negatively affected, including a joint state/federal effort to ensure spills preparedness and coordination on the river and an interagency

effort to design and establish mooring buoys to safely limit environmental damage from tows waiting at locks. It is essential for the Coast Guard to retain the capacity to perform its traditional missions on the Upper Mississippi River. Toward that end, the UMRBA supports the President's fiscal year 2001 budget request for the Coast Guard's Operating Expenses account and urges Congress to ensure that sufficient resources from within this account are allocated to the Coast Guard's inland river work.

The UMRBA does not support the Administration's proposed fees for navigation assistance services. The nation's navigable waterways are a critical part of our transportation infrastructure, just as is the national highway system. Providing the basic services required to operate that infrastructure safely is a fundamental role of government. The benefits of buoy placement and maintenance, vessel traffic services, radio and satellite navigation systems, and waterways regulation do not accrue only to the commercial operators who would be subject to such fees. Recreational boaters also directly use these services. Moreover, municipal and industrial water intake operators, farmers and other shippers, consumers, the river's natural resources, and citizens along the river all benefit indirectly from the contributions that these Coast Guard services make to the safe, efficient operation of the navigation system. One group simply should not be required to pay the costs of services whose real benefits are distributed so broadly.

Several other Coast Guard missions and programs are also important to the Upper Mississippi River states. Unfortunately, devastating floods in recent years have given many of this region's citizens direct personal experience with the importance of the Coast Guard's reservists. Reserve forces are a critical part of the Coast Guard's ability to respond effectively to natural disasters and other large-scale events. In addition, reservists perform key staff functions at many of the marine safety detachments on the inland rivers. The role of reservists in the region has become all the more crucial as the detachments' active duty staffing levels have been reduced. The UMRBA supports the President's request of $73 million for Coast Guard Reserve, an amount intended to support approximately 8,000 reservists nationwide.

In addition, the Coast Guard's boating safety grants to the states have a proven record of success. The Upper Mississippi is a river where all types of recreational craft routinely operate in the vicinity of 15-barge tows, making boating safety all the more important. As levels of both recreational and commercial traffic continue to grow, so too does the potential for user conflicts. Boat safety training and law enforcement are key elements of prevention. The UMRBA asks Congress to appropriate the maximum amount allowed by law to the Boat Safety account to support the states in this important mission.

PREPARED STATEMENT OF THE FLEET RESERVE ASSOCIATION

INTRODUCTION

Mister Chairman and distinguished members of the Subcommittee, the Fleet Reserve Association appreciates the opportunity to present its views with regard to important "people issues" addressed in the fiscal year 2001 Budget for the United States Coast Guard.

FRA's mission is focused on protecting and/or enhancing the pay and benefits for Sea Service enlisted people, and the Association thanks you and members of the Subcommittee for supporting the most significant pay and benefit improvements in nearly 20 years which were enacted by Congress during the First Session of the 106th Congress.

FRA also salutes you for your support, however, the Association is concerned about the availability of adequate funding for these improvements within the Coast Guard budget. FRA believes the Coast Guard should not be required to rely on emergency supplemental appropriations and/or the Department of Defense, or the shifting of precious funds from operations and maintenance accounts to cover these enhancements. As in the past, FRA remains totally committed to ensuring Coast Guard parity with all pay and benefits provided DOD uniformed personnel.

PAY

FRA strongly supports the proposed 3.7 percent active duty pay increase included in the Administration's budget. This follows the higher than Employment Cost Index (ECI) pay adjustment for 2000 (4.8 percent) and subsequent higher than ECI pay adjustments through 2006. These increases are especially important to Coast Guard men and women and positively send a powerful message to service members

about the importance and value of their service to our country. However, at the end of this six-year period, a pay gap in excess of 8 percent will remain between military and civilian pay levels.

Funding the pay increase along with pay table improvements which become effective on 1 July of this year, and the reform of the Redux retirement program so as to maintain parity with DOD is essential to the Coast Guard. FRA is pleased that funds are included in the Administration's budget plan to cover these improvements, however, it cautions that as with pay, these improvements mark a beginning and not the conclusion or solution to the recruiting and retention challenges which determine readiness.

An example of this is the widespread perception within the Uniformed Services enlisted ranks that the career petty officer communities were overlooked in the reform effort enacted as part of the Fiscal Year 2000 National Defense Authorization Act (NDAA). Responding to concerns voiced by its members and other senior enlisted leaders, FRA examined the new pay tables and found that pay rates for grades E–5, E–6, and E–7 are undervalued compared to other pay grades. The Association studied this issue and recently released a report which is endorsed by seven other enlisted organizations and is available on request to FRA's Legislative Team at 703–683–1400, or via the Association's web site at www.fra.org.

It's especially noteworthy to spotlight the growing importance of enlisted leadership and management and the increasing reliance on enlisted personnel to serve in positions of significant responsibility. As is indicated in the FRA study, the Coast Guard has approximately 295 enlisted men and women in grades E–7 through E–9 assigned as Officers in Charge of cutters and stations. The value of these personnel to maintaining operational readiness cannot be overstated.

HOUSING

As of 31 January 2000, there were 34,631 personnel on active duty in the Coast Guard and of this total only about 25 percent live in military housing. The remaining 75 percent reside in communities at or near their duty stations, many of which are high cost areas along our coastlines.

FRA is grateful that additional housing allowance funds were appropriated for fiscal year 2000 to hasten the implementation of new BAH rates at various duty stations throughout the country. New rates were originally protected to prevent reductions during the remainder of current tours of duty. DOD, however, has recently reversed the plan and announced that an additional $27 million will be allocated to the program to ensure that rates remain at, or in cases of rate increases above the 1999 levels.

Adequate funds are required in the Coast Guard budget to cover these unanticipated costs for not only this year but subsequent years. The cost projection for the current year (fiscal year 2000) to pay for these improvements for Coast Guard members is $15 million.

A DOD priority for fiscal year 2001 is to further enhance the housing allowance and a request for this is included in the Administration's budget. The initiative includes paying down the average out of pocket cost from 19 percent to 15 percent—the contribution level intended by Congress—with a long term goal to eliminate the remaining 15 percent over the next several years at a cost of $3 billion for DOD. FRA strongly supports this proposal and urges your support and the appropriation of adequate funds within the Coast Guard budget to cover these enhancements over the implementation period.

While these are solid improvements and funding is included in the Coast Guard's fiscal year 2001 budget, they fail to address the lack of accurate housing cost data in many rural and high cost resort areas where nearly half of all Coast Guard personnel are assigned. The latter remains a significant challenge for all members of the Coast Guard.

HEALTH CARE

Access to quality and affordable health care is characterized by Vince Patton, the Master Chief of the Coast Guard, as "probably the most frustrating quality of life issue for U.S. Coast Guard personnel." FRA concurs and notes that this frustration is cited by some personnel choosing to end their Coast Guard service rather than reenlist for another hitch.

Despite the assumption (and recruiting promise) that all active duty personnel and their families will be provided with free health care, many Coast Guard members have limited access to government health care treatment facilities and face significant out-of-pocket expenses for health care. Only half of these personnel are able to participate in DOD's Tricare Prime managed care program because their duty lo-

cation is close enough to a military treatment facility (MTF). Those who are not close to MTFs must select Tricare Standard for outpatient treatment needs which requires a 20 percent out of pocket cost share along with a $300 annual family deductible.

Compounding the situation for the latter is the fact that most medical facilities charge more than the Tricare "allowable charge" for care, and service members must pay the difference on top of the deductible and 20 percent out of pocket cost.

A second DOD priority for fiscal year 2001 is improving health care. Although the budget includes no additional funds to address significant health care problems facing military retirees, it does include expanded Tricare Prime Remote coverage for family members (following enactment of coverage for service members last year), and the elimination of co-pays required from active duty families who do not reside near MTFs. FRA strongly supports these enhancements.

The Tricare Prime Remote coverage is especially important to the Coast Guard because so many of its members serve in locations far removed from MTFs. Not only do these personnel face significant housing costs in many of these areas, but also the added burden of these health care costs.

RECRUITING, RETENTION AND RESERVE TRAINING (RT)

Just as its sister services are struggling to make recruiting quotas, so too is the Coast Guard which despite the current environment, achieved its mission for recruiting last year. In 2000, Coast Guard recruiters are behind at the present time and must work hard to enlist 4,700 active duty, 1,100 reservists and around 500 officers. This is a difficult challenge given the state of the economy, declining unemployment rates and the low propensity of young people to consider the uniformed services as an option in their life plans. Equally challenging is effectively competing with the Department of Defense and the individual services' larger advertising budgets.

The retention of seasoned mid-career and senior enlisted personnel is also especially important to sustaining readiness and mission capabilities. The thriving economy is a powerful draw to these service members, many of whom can earn considerably more in the civilian marketplace. This is not only a concern at the mid-career level, but also in the senior enlisted ranks at the 20-year or beyond point. Capable, experienced mid-grade petty officers and more senior chief petty officers are essential to the force and when their ranks are thinned by such departures, readiness suffers significantly. Therefore, it's essential to retain as many of these key personnel as possible through re-enlistment bonuses, benefit improvements and other career incentives.

Unfortunately, the Coast Guard can only offer a fraction of the bonuses and other benefits that the DOD services provide. For instance, the Coast Guard provides $1,500 per year for individual tuition assistance whereas DOD service members can draw a maximum of $3,500. Enlistment bonuses for Coast Guard recruits range from $2,000 to $12,000 and cannot be combined with a college fund stipend while DOD offers from $2,000 to $20,000 combined with college fund amounts that can total up to $70,000. (Note that the USCG college fund maximum is $30,000 and DOD's is $50,000.) Finally, the Coast Guard can offer up to $45,000 for selective reenlistment bonuses for key skill rates while DOD offers up to $60,000.

Despite these variances, FRA notes progress in closing the gaps for these and other allowances in recent years, however more must be done to ensure parity.

During the past year Coast Guard recruiters also accessed adequate numbers of reserve personnel to achieve the 8,000 billet end strength—a major accomplishment given the environment discussed earlier. However, funding for reserve training only supports 7,300 personnel in the Administration's fiscal year 2001 budget request. Without an additional $7 million, the Coast Guard may be required to reduce on board selected reservists to match the funding level—an option FRA believes is unacceptable given the demanding operational requirements assigned to the Coast Guard and the increasing reliance on reservists to augment active duty personnel.

Funding shortfalls are troublesome and can lead to declining operational readiness and capabilities not only in the reserve ranks but throughout the Coast Guard. Adm. James Loy, Commandant of the Coast Guard, stated in his recent State of the Coast Guard address (March 7, 2000), that " More than one quarter of our enlisted members at operational marine safety units have not received the entry-level marine safety course they need to perform their duties efficiently and (they) have not been scheduled to receive this training before the end of this year." Further, he stated that "Our vessel traffic services still face a 21 percent vacancy rate among the Quartermaster and Radarman ratings—a problem that cannot help but introduce excess fatigue to these safety sensitive positions."

CONCLUSION

Again, Mr. Chairman, thank you for the opportunity to present the Association's views. FRA again salutes you for your commitment to the men and women serving today and also to those who've served in the past. As indicated above, the FRA strongly supports the Administration's budget proposal as the minimum necessary to sustain the Coast Guard's current capabilities and its personnel. The five percent increase over last year's budget is warranted and enthusiastically endorsed by FRA and is hopefully the beginning of a trend toward greater funding not only for compensation and other personnel benefits, but also for maintenance, training, recapitalization and other requirements.

The Coast Guard provides tremendous service to our Nation with a minimal investment of roughly one quarter of one percent of the Federal budget. The growth of responsibilities assigned to the service has not been matched with adequate resources and this is imposing an exhausting toll on its people who must sustain demanding operational commitments—often without adequate training and/or equipment maintenance.

A recently published opinion piece by Christopher M. Lehman in the Washington Times (Feb. 24, 2000) offers perspective on the current situation. He wrote, "Just like its sister military services . . . the Coast Guard has been asked to perform more and more missions with fewer resources. Aging ships and aircraft, increased operational tempo, fewer people, inadequate training, spare parts shortages, and insufficient funds for housing, pay and benefits—these are the symptoms of a weakened U.S. Coast Guard. The Coast Guard is losing its edge. It has been stretched to the limit."

This scenario is real. Please support funding to adequately compensate Coast Guard personnel for their tremendous and untiring service to our Nation and fully fund other benefits so as to achieve and/or maintain parity with those offered to DOD uniformed personnel.

Thanks for your strong commitment and continuing support of the men and women serving so magnificently in the United States Coast Guard.

PREPARED STATEMENT OF THE RESERVE OFFICERS ASSOCIATION OF THE UNITED STATES

COAST GUARD RESERVE

We wish to thank this committee for the strong support that it has provided the Coast Guard Reserve in the past. Nevertheless, funding for the Coast Guard is very austere, providing only the minimum level required for basic services. Similarly, funding for the Department of Defense and the Department of the Navy remains constrained. Therefore, it is vital to be farsighted as we cross into the 21st century, to ensure a continued robust sea power.

We further recognize that the Coast Guard is not the Navy, but a distinctive armed force with a separate identity and purpose. Nevertheless, the Coast Guard's people, systems, and platforms provide important national and international capabilities that complement the U.S. Navy. As indicated by the Joint Chiefs of Staff in "Joint Force Capabilities" (Joint Pub 3–33 dated October 13, 1999):

> "During deployment and redeployment operations for the joint force, the Coast Guard can provide force protection of military shipping at U.S. seaports of embarkation and overseas ports of debarkation by conducting port security and harbor defense operations with port security units and patrol craft. Major cutters are deployed to participate in maritime interception operations to enforce sanctions against another nation and to conduct peacetime engagement activities. Port safety responsibilities in the continental United States (CONUS) include the establishment, certification, and supervision of ammunition loading operations."

Furthermore, as noted by Dr. Scott C. Truver in his paper, "American Seapower in the 21st Century," the Coast Guard, along with the other Naval Services, has a distinct history of port visits, training and exercising with regional navies and coast guards, working with local maritime agencies and organizations. Likewise, the Coast Guard has played important roles in supporting U.N. sanctions around the world. Coast Guard law enforcement detachments (LEDETs) conducted literally tens of thousands of searches of ships suspected of violating U.N. embargoes. During the U.N. embargo of the former Yugoslavia, Coast Guard LEDETs served in U.S. Navy surface combatants and provided the law-enforcement and search-expertise necessary to conduct boardings and to detect contraband. Such maritime interdiction

operations (MIOs) were also conducted by Coast Guard LEDETs riding Navy warships in the Persian Gulf and Red Sea. In addition, the USCG Cutter Morgenthau (WHEC–722) deployed to the Persian Gulf to assist the U.S. Central Command's enforcement of U.N. embargoes against Iraq.

In recent years, the Coast Guard has deployed three cutters—USCGC Bear, USCGC Dallas and Gallatin—to the Mediterranean, Black and Baltic seas. Coast Guard port security units and aviation squadrons have also been sent to Turkey, the northern Red Sea, and the Persian Gulf.

The demand for high profile, visible overseas presence by U.S. forces will not diminish in the years ahead. This need will almost certainly increase as natural disasters; humanitarian crises, nation-building programs, and threats to U.S. interests generate continuous calls for active U.S. engagement and involvement. But, the Navy will be increasingly challenged in its ability to meet all commitments. This fact of life has significant implications for the Navy, the Coast Guard, and the nation.

Because of the growing sophistication of naval weapons systems, the Coast Guard will not perform "high-end" warfighting missions. This, however, does not mean the Coast Guard will not have a warfighting role. With a Navy of 116 or fewer surface combatants, and in a world plagued with regional instability and strife, the Coast Guard's major cutters—along with several hundred coastal patrol boats—take on new significance. In this regard, the Coast Guard is a force-in-being, trained, capable, and ready for small-scale contingency operations, and force protection in major theater war. Most fundamentally, the president and the unified CINCs require a full spectrum of naval capabilities to meet tomorrow's maritime challenges.

In response to multiple assessments of future mission requirements and a continuous scanning of the long-range planning horizon, the Coast Guard is examining its "deepwater capability" for the next century. From the Coast Guard's perspective, "deepwater" means any operations—civilian or military—conducted more than 50 miles from the coast. These ships would carry C4ISR architecture—especially the Navy's evolving Network-Centric Warfare concept—which will link its surface and airborne systems with shore-based command structures and allow seamless integration of Coast Guard assets with all U.S. Armed Forces.

The Coast Guard, however, currently operates ships with high personnel and maintenance costs. Some ships have been in service for more than 50 years. Simply stated, the continued protection of the public, at a lower cost, requires further investment to enable the Coast Guard to design more capable and less labor-intensive ships and aircraft. Without the necessary investment, pressure will continue to build on the operational account, as anticipated lower personnel and maintenance costs that would be achieved through investment become unachievable.

The need for this investment was recently highlighted in the report of the Interagency Task Force on U.S. Coast Guard Roles and Missions. This report was compiled by senior members of the Clinton/Gore administration. The report concluded that the Coast Guard's roles and missions support national policies that will endure into the 21st century, and that the recapitalization of the Coast Guard's Deepwater capability is a near term national priority. The report further stated that Deepwater Acquisition is a sound approach to modernizing the Coast Guard's aging fleet of assets.

Investment in the Coast Guard's "Deepwater" program, the Coast Guard's plan to modernize its major cutters, aircraft, and command, control, communications, computer, intelligence, surveillance, and reconnaissance (C_4I) systems is critical. Adequate investment will sustain the Coast Guard's capability for providing services critical to America's public safety, environmental protection, and national security for the next 30 years—through the replacement of assets that are at, or fast approaching, the end of their service lives. The Coast Guard's medium and high endurance cutters, acquired through the Deepwater program, will be readily available to support critical Department of Defense operations such as maritime surveillance and interception, convoy escort, search and rescue, and enforcement of maritime sanctions, as was the case during Operation Desert Storm. Such options allow Navy "high end" ships to be more effectively employed in higher threat/combat operations. In addition, as the Navy surface combatant fleet grows smaller, the future cutter will provide an extremely cost-effective "dual capability," by providing not only the ability for the Coast Guard to perform its peacetime mission, but the vital operational capabilities vitally needed by the Navy and DOD in the 21st century.

With the Government Performance and Results Act (GPRA), the Congress has said to federal agencies that it supports results-based government. The Coast Guard has whole-heartedly committed itself to results-based government, as much as or more than any other federal agency. The Coast Guard has overhauled its strategic planning and capital asset management processes. The Commandant's Quality

Award is designed to encourage results-based government by using the attributes of the President's Quality Award and the Malcolm Baldrige Award criteria. The Coast Guard is often referred to as one of the taxpayers' best investments. Government Executive magazine published in its March 2000 issue, a segment of its Government Performance Project examining Coast Guard management practices and praising the Coast Guard for its stewardship of the taxpayer's money. This praise is well deserved, and while surely gratifying to members of Team Coast Guard, such accolades alone will not send the signal to other agencies to follow the Coast Guard's exceptional leadership.

Agencies that commit to results-based government must be rewarded in the budget process with adequate funding. ROA urges the Congress to consider most seriously which signal it wants to send federal agencies through the budget process. The federal government is filled with dedicated public servants and service members who applaud the intent of GPRA, but many question the resolve behind it. With the Coast Guard, the Congress has an opportunity to demonstrate its resolve by rewarding this high performance agency example with adequate resources to do its many jobs for the Nation.

COAST GUARD SELECTED RESERVE STRENGTH

The fiscal year 2001 administration request is to maintain the Coast Guard Selected Reserve's authorized end-strength at the 8,000-level, whereas the appropriation's request is for 7,300. As the Coast Guard Reserve's current actual strength is over 8,000, thanks to the $5,000,000 fiscal year 1999 Readiness Supplemental Appropriation to meet the congressional mandate of 8,000 Coast Guard Reservists, we have very serious concerns regarding the administration's proposal for an appropriated end-strength of only 7,300. We also have concerns regarding an authorized end-strength of only 8,000, in view of the fact that the commandant, as directed by OMB, has conducted an in-depth study that clearly indicates and justifies a requirement nearly 12,300 Coast Guard Reservists. Further, the 1997 Study did not include any maritime security requirements needed to counter more recently identified homeland security risks in U.S. ports and waterways from weapons of mass destruction. In this regard, we would request that the committee undertake a detailed examination of Coast Guard Reserve requirements.

In recent years, the Congress, the administration, and Coast Guard leadership have increasingly recognized the unique capabilities of the Coast Guard Reserve. It is well recognized that the Coast Guard Reserve is a value-added resource for peacetime day-to-day operations, as well as a highly cost-effective source of trained personnel to meet military contingency and other surge requirements. For example, as noted by the House Transportation Appropriations Subcommittee, Coast Guard Reservists provided 25 percent of the total surge needed for the very successful anti-drug initiative Frontier Shield. Furthermore, as the nation faces the ever-increasing threat to homeland security from weapons of mass destruction, it will be necessary to further rely on the Coast Guard Reserve for its unique capabilities to provide a ready trained surge force.

In view of the foregoing, a request to fund only 7,300 Reservists simply makes no sense at a time when the Coast Guard has just succeeded in completely eliminating the end-strength shortfall that has existed over the past several years. The Coast Guard has increased its recruiting capabilities and put into place a multi-year plan to keep the Coast Guard Reserve at full strength. As of February 18, 2000 Coast Guard Reserve strength was at 8,110, having increased from a 2-year low of 7,243 in April 1998. Of further note, there were 183 Reservists, on extended active duty and long-term active duty for special work, filling active duty shortfalls. The number of Reservists on active duty is the direct result of the Coast Guard's solicitation of volunteers from the Selected Reserve to serve on extended active duty to fill full-time active duty billets for periods of 2 to 4 years.

In addition, it must be noted that the Coast Guard has made significant headway in intensifying its Reserve recruiting over the past year. Such efforts have included the designation of at least 38 recruiters to access Reservists. In addition, there has been heightened attention to Reserve recruiting, including intensive efforts to attract more Reserve affiliations from the ranks of Active component members leaving active duty for civilian life. In 1999, 26 percent of eligible members leaving active duty chose to become reservists.

In summary, the Congress and the Coast Guard have made the substantial financial and manpower commitment to rectify the Reserve end-strength problem. As a result, significant progress has been, and will continue to be made. In addition, the Coast Guard is now making it easier for active duty commands to ascertain Reservists' skills and availability for active duty through the newly established Reserve

Availability Pool web site (http://www.uscg.mil/reserve/respool/respool.htm). As a result, the demand for Reservists to fill fleet requirements in a Coast Guard that is short of personnel can only be expected to increase. It, therefore, makes little sense at this juncture to reverse course and force the Coast Guard Reserve end-strength downward. This would amount to nothing less than squandering the Congress' fiscal year 1999 Readiness Supplemental investment, which resulted in the successful restoration of the Coast Guard Reserve Force to its full 8,000 authorized strength.

COAST GUARD RESERVE FUNDING

The administration has requested $73.3 million for the Reserve Training (RT) appropriation for fiscal year 2001, with $26.2 million in reimbursement to operating expenses. Given the present procedures for reimbursement for operating expenses and direct payments by the Coast Guard Reserve, this is the minimum needed to fund a full training program for 7,300 personnel. Even at this minimal funding level, Coast Guard Reservists would continue to receive only 12 days of annual training (AT) each year (all the other armed services prescribe to 14 days' AT as required by statute).

The funding required in fiscal year 2000 to support the full 8,000-level authorized is approximately $77.4 million. It should, however, be noted that the fiscal year 2000 appropriations bill, in appropriating $72 million for the Coast Guard Reserve, limited the amount of Reserve training funds that may be transferred to operating expenses to $21.5 million, giving the Reserve an effective budget of $73.65 million. This resulted in an approximate $3.75 million operating shortfall, which requires the Coast Guard Reserve to either reduce strength or to cover by implementing painful current year cuts in accession/retention bonuses, training, and support.

The Conference Report noted that although the appropriation was constrained that: "The conferees agree that all efforts should be made to achieve and maintain a Selected Reserve level of at least 8,000 during fiscal year 2000."

Given the continuing high OPTEMPO/PERSTEMPO stress on the entire Coast Guard workforce and the congressional language to hold strength insofar as possible, the Coast Guard Reserve is trying to maintain its strength for this year. The ROA urges the Congress to consider a readiness supplemental appropriation for fiscal year 2000 to enable the Coast Guard Reserve to restore these cuts in training, recruiting and support otherwise required to maintain their full-authorized strength.

ROA thanks the Congress for its recognition of the significant capability provided by the Coast Guard Reserve and for the provision of this additional funding through the limitation in reimbursement for operating expenses. In this regard, the Coast Guard is the only component among all the armed services that reimburses operating expenses to the Active account. The Coast Guard is reviewing its procedures for reimbursement with a view toward modification in fiscal year 2001, and we agree that the proposed modification is fair and equitable. We would, however, note, that the bottom line is that the Coast Guard Reserve must have sufficient funding for 8,000 Reservists and that the reimbursement cap has over the past 3 years provided over $4 million of this much needed funding. Accordingly, we would ask that any proposed change in procedures be closely examined and meticulously monitored—to ensure that the Coast Guard Reserve strength is fully funded at a level of 8,500 ($85 million, or $88.3 million with the refund issue resolved).

Just as the Coast Guard has whole-heartedly committed itself to results-based government, the Coast Guard Reserve has led the way through the concept of Team Coast Guard. The Coast Guard Reserve spearheaded this concept of AC/RC integration in 1994. With the goal of increasing the taxpayer's return on investment, the Coast Guard Reserve and Coast Guard took on the cultural challenge of creating Team Coast Guard. There are no longer AC missions and RC missions, there are only Coast Guard missions. There is one command structure, one support structure, and one administrative structure. Coast Guard integration is held as an effective model to DOD components. As the Coast Guard Reserve continues to evolve AC/RC integration, ROA urges the Congress to consider what signal it sends to other AC and RC components if it does not fully fund the Coast Guard Reserve or funds it at the expense of the Active component.

TEAM COAST GUARD

We continue to support the goals and objectives of Team Coast Guard. The Coast Guard Reserve has become the "bench-strength" of the active duty force. In this regard, a strength of 8,000 Coast Guard Reservists equates to only 506 full-time equivalent positions. Of further note, the Coast Guard Reserve provides the ability to surge the Coast Guard by an additional 23 percent, at a cost of just 2 percent

of the Coast Guard's total budget. In this respect, the Coast Guard Reserve is extremely cost-effective. Furthermore, the Reserve component provides double benefit because Reservists are only paid when on duty and because Reservists obtain their training for emergency response by assisting the Coast Guard in its peacetime functions.

Simply stated, the Reserve leverages the entire organization and stands ready to go in response to both domestic and national emergencies. As a result, the Coast Guard is readily able to surge its forces to meet domestic emergencies in an extremely cost-effective manner, as well as to respond to national emergencies, including vital harbor security for the Department of Defense with the Coast Guard Reserve Port Security Units. At the same time, the failure to meet Reserve end-strength requirements adversely affects the Coast Guard and, therefore, adversely affects the safety of those operating on the nation's ports, rivers and waterways and off the shoreline of the United States.

In an effort to assess the progress of Team Coast Guard and its impact on Reservists, we canvassed our membership in December 1999, asking for their views. Of the many responses we received, several issues emerged. These issues are as follows:

Travel reimbursement.—Many Reservists, including enlisted Reservists, must travel long distances to drill. The following quotations from drilling Reservists provide additional insight into this issue.

> "In many instances drilling Reservists have to travel upwards of 330 miles one-way to reach their duty sites. This issue of auto-travel-reimbursement is particularly problematic for junior enlisted personnel whose drill pay is already relatively small."
>
> "We currently have a number of enlisted traveling in excess of 350 miles one-way to drill. One (junior officer) is traveling 650 miles one-way to drill."
>
> "I have an E–3 who pays more for his transportation to monthly drill than he gets paid. In other words, he is paying cash in order to be able to drill."

Meaningful billets and lack of flexibility upon advancement.—This issue was addressed in the 1998 Coast Guard Reserve Policy Board report that was approved by the Secretary of Transportation on December 1999. The report states:

> "When most Reserve command cadre billets were eliminated by integration, senior Reserve officers and senior enlisted lost their traditional management roles. The force structure and roles for senior Reserve personnel need to be reviewed as program requirements are established. [This issue]—is about appropriately using personnel in whom taxpayers have invested heavily. Furthermore, it is about ensuring that Reserve personnel perceive they can engage in fully satisfying and challenging work throughout a full career in the Reserve Component."

The following quotation from drilling Reservists provides additional insight.

> "I am still concerned that senior Coast Guard officers and enlisted Reserve personnel may not have much to aspire to . . ."
>
> "A major issue still unresolved is how the Coast Guard will more effectively utilize its senior officers and enlisted Reservists consistent with their rank."
>
> "Due to many active command structures, there don't seen to be as many opportunities as in the past. There certainly do not seem to be as many opportunities for command or senior executive staff positions. With the noted exception of port security units, career paths for Reserve officers are not as clear as previously."
>
> "With very few senior billets and minimum flexibility (allowing senior people to fill lower ranking billets), many see no real career path. We have seen at least two first class petty officers that have refused to take the examination for chief petty officer because there is not a chief's billet available. In their cases, they had well in excess of 10 years of service and were concerned that they would not be able to maintain a billet long enough to finish 20 years if they were selected as chief petty officers. The same situation applies to lieutenants and to lieutenant commanders. There are many who are seriously concerned about achieving 20 years' service."

The 1998 Coast Guard Reserve Policy Board report, approved by the Secretary of Transportation on December 9, 1999, also provides further insight into this issue. It states as follows:

"Reserve force employment is not consistent throughout the Coast Guard. It has evolved over the years based upon the personalities and interests of commands, and the personalities and capabilities of individual Reservists. The current Reserve Personnel Allowance List (RPAL) was developed in 1996–97 largely upon then-existing Reserve assignments. As a result, one unit may have a dozen RPAL billets while a similar unit may have no billets. Even when Reserve billet structures are consistent between or among similar commands, units often have different philosophies on employing Reservists. Some commands use Reservists interchangeably with Active duty personnel. Other commands use Reservists primarily to replace Active duty personnel when billets are vacant during the transfer season or leave periods. Some assign Reservists to work independently on special projects. We recognize that field units need flexibility in employing Reserve forces. Yet headquarters, areas, and districts need to identify program requirements for Reserve employment, and to provide guidance to field units on employing Reserves. Based on these program requirements and guidance, the RPAL then can be revised to better reflect service needs. When the workforce structure has been redefined by a revised RPAL, Reserve personnel can be recruited, trained, and assigned to meet established requirements. Reserve personnel will have more meaningful assignments; they will not have to create their own niches at each command."

Difficulty in meeting Reserve-unique administrative and training needs.—The following quotation from a drilling Reservist provides additional insight into this issue.

"—for enlisted Reservists—many of their Reserve-unique administrative and training needs are not being as adequately addressed as—in the past. Ultimately, junior enlisted personnel do not seem to be receiving the same level of attention and direction needed for retention and advancement."

COAST GUARD RESERVE EQUIPMENT

Like the other armed services, the Coast Guard is in need of equipment for its Reserve Component. In fiscal year 1998, the Congress provided over $13 million for the much needed refurbishment of its existing three port security units and the establishment of three additional port security units. Today, the Coast Guard Reserve is in need of equipment for its Mobile Support Units, as well as chemical, biological, and radiological defense equipment.

Mobile Support Units (MSUs) are Reserve units designed to be a limited deployable logistical and maintenance support and repair facility service for one, and under certain circumstances, for up to two co-located squadrons of Coast Guard 110-foot patrol boats. These units are staffed by Reservists and will support the Active component (and the combatant commanders-in-chief) when deployed for operations overseas. The MSU provides on-site repair facilities for hull maintenance and engineering and electronics systems for use by support personnel assigned for operational maintenance.

Mobile Support Unit Equipment

Item	*Cost*
TRUCK, TRACTOR TRAILER	$105,000
TRAILER, CONNEX BOX	30,000
TRUCK, PICK-UP	25,000
FORKLIFT, 10,000 LB	20,000
GENERATOR SET 160KW & SPARE PARTS KIT	23,000
WELDER, GAS POWERED	3,000
TOOLS	148,000
ADMIN SUPPORT KIT	5,500
COMPUTER HARDWARE	18,000
COMMUNICATIONS HARDWARE	23,000
EQUIPMENT, GENERAL	14,000
GENERAL U.S.E/CONSUMABLE ITEMS	5,000
TOTAL	419,500

Chemical, biological, and radiological defense is required for Coast Guard Reserve personnel assigned to the Marine Safety Offices who have Department of Defense strategic load-out responsibilities. The current mobilization requirements call for a Reserve personnel requirement in excess of 3,500 personnel.

Chemical, Biological, and Radiological Defense Equipment

Item	*Cost*
Mask, Mark 40 A–1	$1,080,000
CBR–D Gear	1,656,000
Canister, CBR–D Mask	57,600
Kits, CBR–D antidote	295,200
Decon Kits	46,800
Total	3,135,600

LEGISLATIVE ISSUES

There is one legislative issue we would appreciate Congress' examining. The fiscal year 1999 National Defense Department Authorization Act included a provision prohibiting Selected Reserve end strength fluctuations among the DOD reserve components of greater than 2 percent. This legislation did not apply to the Coast Guard Reserve. We believe 10 U.S.C 115(c) should be amended to specifically include the Coast Guard Reserve. This would improve parity among the Coast Guard and the other military services while helping eliminate the ongoing mismatch between authorized and funded Coast Guard Selected Reserve end strength.

CONCLUSION

Thank you for this opportunity to present the association's views on the fiscal year 2001 Coast Guard Reserve Budget. I also thank you again for your past support of the Coast Guard Reserve. With your continued support the Coast Guard Reserve will continue to play a key role in the our national defense.

MISCELLANEOUS

PREPARED STATEMENT OF THE LOVELACE RESPIRATORY RESEARCH INSTITUTE (LRRI)

Support from the U.S. Department of Transportation is requested for the National Environmental Respiratory Center to conduct research and provide information on the contributions of transportation sources to the respiratory health risks from inhaling mixtures of air pollutants from multiple sources.

THE NATIONAL ENVIRONMENTAL RESPIRATORY CENTER IS A NEW MULTI-STAKEHOLDER RESEARCH PROGRAM

The National Environmental Respiratory Center was established by Congress through the fiscal year 1998 EPA appropriation. The mission of the Center is to facilitate and participate in a long-range national initiative to understand respiratory health risks from complex mixtures of environmental air contaminants from many sources. The Center will help place the respiratory health risks from variable, mixed pollutant atmospheres in their appropriate context as a basis for strategic, regulatory, and technological decision making. The work of the Center is relevant to the interests of a broad range of government and non-government stakeholders. From the outset, the Center was intended to meet the needs of multiple stakeholders by building on core funding from EPA as a joint effort among multiple federal and state agencies, corporations and industry associations, and health and environmental advocacy groups. The Center is operated by the independent, non-profit Lovelace Respiratory Research Institute in Albuquerque, New Mexico.

THE CENTER WILL PRODUCE NEW INFORMATION IMPORTANT TO DOT

DOT Does Not Know the Contribution of Transportation Sources to the Health Impacts of Air Pollution

We do not currently have a satisfactory understanding of the relative contributions of emissions from transportation sources, air pollutants from other man-made sources, and natural air contaminants to the aggregate adverse health outcomes associated statistically with air quality. This deficiency creates uncertainty in strategic and regulatory decisions about choices among different transportation technologies. For example, we do not have a solid understanding of the total health gains or losses that might accrue by choosing between new generation petroleum-based fuels and engines and alternate motive power technologies such as natural gas or biodiesel-fueled internal combustion engines or electric motors powered by batteries charged by power from remote generation stations.

We do not even have, at present, a satisfactory understanding of the relative contributions of the individual constituents of single emission mixtures (such as engine exhaust) to the total effects of that mixture. This deficiency is impeding the evolution of technology (such as changes in engines, fuels, or exhaust after treatment) to mitigate health risks by reducing emissions of specific classes of air contaminants.

This Information Gap is Becoming More Critical with Time

As air quality in the nation improves, understanding the health effects of mixtures of air contaminants is becoming progressively more important. It is becoming less likely that the adverse health effects observed in populations are attributable to single pollutants or sources. We face an increasing difficulty in making strategic choices and investments, and an increasing likelihood of making ill-advised decisions.

The "mixtures" problem is not a new issue. It has long been recognized, but has never been brought to the forefront of debate or research focus. Many organizations have considered the issue and consciously avoided making it a central theme because of its complexity and because of financial incentives to focus on the "pollutant of the year". The recent debates on the health effects of ozone, airborne particles, and diesel exhaust have focused increasing attention on air pollution mixtures and our ignorance concerning them. In contrast to the past, few discussions about the health effects of air pollution occur today without mention of the mixtures dilemma and our lack of knowledge.

No Other Research Program has Focused on Air Pollution Mixtures

Our present regulatory and research approaches tend to steer attention away from the truth that all exposures to air pollutants are exposures to mixtures. Under the present Clean Air Act and other regulatory mandates, the focus has been on debating the effects of single pollutants and pollutant sources in a "one-at-a-time", "revolving door" manner. This approach results in the conduct of reactive research focused on single pollutant classes. Thus, the pressures of single-pollutant issues result in little emphasis being given to work aimed at understanding the relationship between air quality and health in an integrated manner.

The Center was Created Specifically to Meet these Needs

The National Environmental Respiratory Center was created by Congress through the EPA appropriation in response to Lovelace's proposal to develop a significant research and information program that would join multiple federal, state, and non-government stakeholders together in an effort to substantially improve our ability to place the respiratory health risks of air pollution mixtures in their proper context. Although the Center can not meet the full spectrum of mixtures-related information needs, it was intended to play a leadership role in integrating the support of multiple sponsors into a substantial, multi-year program of focused research designed with broad input and providing knowledge needed by the full range of stakeholders.

There are many possible approaches to mixtures research, and no single program can encompass them all. The strategy for this Center was selected to take advantage of the unique research strengths of Lovelace to conduct work that will move our understanding of the importance of key man-made pollution significantly forward. The strategy selected could not be funded through typical grants programs and would not, and perhaps could not, be undertaken by any other organization.

THE CENTER'S WORK HAS BEGUN AND DOT SUPPORT IS CRITICAL

The Center's Research Strategy Has Been Developed and Work Has Begun

By express intent, Lovelace involved a cross-section of stakeholders and technical experts in developing the scope of the Center's activities and the specific research strategy to be undertaken. This strategy will not only ensure that the Center's efforts are guided by the best current thinking, but will also facilitate broad acceptance of its findings. A highly qualified External Scientific Advisory Committee was developed with members from academia, government, industry, and the health and environmental advocacy sector. This Committee was integral to the process of defining the Center's agenda as: (1) a highly-focused multi-year research program; and (2) a source of information and a catalyst of cross-disciplinary communication in the mixtures field. The first studies of the Center's initial five-year research effort are now being initiated. The complex atmospheres to be studied include heavy-duty and light-duty engine emissions and paved and unpaved road dust. Although sufficient support has been developed to initiate the work, there is not yet a sufficient commitment to ensure that the work will continue, or continue at a rate that fulfills the

strategy or meets DOT information needs in a timely manner. A commitment from DOT would ensure that the information relevant to the Agency is produced, and within the Agency's strategic timelines.

The first multi-year series of studies will generate a matrix of data by applying identical, detailed, contemporary laboratory assays of respiratory health effects to several real-world, man-made, complex exposure atmospheres. The atmospheres will include engine exhaust (diesel, old and new; gasoline, catalyst and non-catalyst), wood smoke (hardwood and softwood), tobacco smoke, cooking fumes (meat and vegetable), road dust, and power plant emissions (including secondary transformation products). Importantly, these complex atmospheres will provide an array of overlapping, but different compositions. A range of predictive health assays was selected to span the types of health impacts thought to be associated with air pollution. These effects assays encompass the general categories of inflammation and tissue toxicity, asthma and amplification of allergic responses, respiratory defenses (particle clearance and resistance to infection), lung and heart function, and cancer potential. The atmospheres will be characterized in great detail, as a basis for determining the health impacts of individual constituents.

The information resulting from the multi-year research matrix will serve three principal purposes. First, the studies will produce contemporary toxicity information on transportation-related emissions of current concern. Second, the studies will make available, for the first time ever, information allowing the direct comparison of the health impacts of these atmospheres by identical health assays. Finally, the identical health assays and the different, but overlapping, compositions of the atmospheres will allow, for the first time, the use of statistical and modeling procedures to identify the contributions of individual mixture constituents, and classes of constituents to the different health effects.

The Financial Commitment Required to Conduct the Work Has Not Yet Been Achieved

As intended by Congress, the Center's agenda was developed by identifying the most critical information needs and the best strategy for meeting those needs, rather than constraining the plan to the amount of resources provided through the EPA appropriation. Because the information to be produced is important to a broad range of stakeholders, it was intended from the beginning that other federal agencies, states, and industry would also be recruited to support the effort. If the research described above is conducted over a five-year period beginning in early fiscal year 2000 and the statistical analyses are completed within the following year, it is estimated that the total six-year (fiscal years 2000–2005) cost of Center operations will be over $24 million (in fiscal year 2000 dollars), or over $4 million per year. Therefore, if EPA support continues at the fiscal year 2000 level of $1.8 million per year, the level of funding must more than double.

The Department's Support will be Highly Leveraged by Other Stakeholders

The leg-work has already been done that creates an opportunity for the Department to get information it badly needs cost-effectively by sharing the cost with other stakeholders who need the same information. Lovelace has undertaken the task of complementing the support from EPA as necessary with support developed from other stakeholders. Considerable effort is being expended to discuss the mission and strategy of the Center with several federal and state agencies and a wide range of non-government organizations and trade associations. This effort has been successful, but is still far short of the goal. In addition to support from EPA, the Department of Energy began funding the Center during fiscal year 2000. Lovelace has developed approximately $0.5 million in funding from industry, much of it from the transportation sector. Contributing organizations include (alphabetically) American Trucking Association, California Trucking Association, Caterpillar Inc., Chemical Manufacturers Association, Cummins Engine Co., Detroit Diesel Corp., Exxon Corp., Ford Motor Co., Navistar International, Phillips Petroleum, and the Southern Co. Discussions are underway with numerous additional companies and trade associations. Among states, the California Air Resources Board has committed support, and discussion with other state agencies is underway.

Lovelace Requests Support From the Department Of Energy

Financial support is growing, but falls short of the level required to get the job done. We will need over $4 million per year over the next six years to follow the consensus advice we have received. The Center's work is relevant to the policy interests of the Department regarding the nation's long-range transportation strategy, and the influence of air quality issues as a driver of strategic choices. Participation in this program can, in part, fulfill the Agency's environmental mandates as well as meet strategic information needs. Several discussions have been held with De-

partment officials, and there is agreement that the mission of the Center and the information it will produce are relevant to the Department.

Lovelace respectfully requests that $2 million be allocated in the fiscal year 2001 Department of Transportation budget to support work of the National Environmental Respiratory Center relevant to transportation-related issues.

PREPARED STATEMENT OF THE STYLIN' CONCEPTS CORPORATION

My name is John Milos. Together with my wife, I am the owner of Stylin' Concepts, a small business located in Independence, Ohio, that sells automotive accessories for safety, fuel efficiency, and other uses. It is my privilege to testify today before you about the adverse impact that a reduction in the availability of information from motor vehicle records, let alone a total cut off, will have on my business.

As a direct marketer that mails to millions of Americans every year, we applaud your spirit to protect the individual. In fact, responsible direct marketers like Stylin' Concepts and others all over this nation have taken extreme and costly efforts on our own for decades to insure our customers' privacy. Privacy is nothing new to us. As direct marketers, we really don't want to market to someone who doesn't want to receive our material. It's just not good business sense to be throwing money away. However, last year's amendments to the Driver's Privacy Protection Act requiring an opt in for use of motor vehicle record data for marketing purposes will do great damage to consumers and employees in the direct marketing business. We are a small business of approximately $8 million in sales and 75 percent of our business comes from the Auto Registration records this law would make unavailable.

We produce an automotive accessories catalog that features products for safety, fuel efficiency, comfort and style. Other than the auto registration records, there is no other source for this information. This law, if it becomes effective, will eliminate 75 percent of our business and force the layoff of dozens of employees, many of which are single parents, college students, or handicapped.

It's important to understand that our interests are for consumers who have a particular vehicle. When we know what type of vehicle a consumer owns, we send them a catalog specific to that vehicle. The names are gathered by Polk, the main compiler in the U.S. Polk then sends the names to our printer, who puts the labels on the catalogs and mails them. We never see the name nor do we keep it unless someone calls us, decides to purchase something from us, and gives us their name and address.

Ultimately, that consumer has the final choice of privacy. First, by just throwing our catalog away, and secondly, any consumer can put their name on the DMA's "suppression" list. Responsible mailers, like Stylin' Concepts, run their prospect lists, such as the Motor Vehicle Registration information, through this suppression list before every mailing, at our cost, and that person never gets mailed to. In addition, we maintain an internal suppression file for anyone that tells us they do not want to receive our catalog.

We are only looking for the interested consumer who has the specific vehicle that we have catalogs for. There is a high likelihood this person will be interested in our products. Studies show the average person in America overwhelmingly wants to receive direct mail about products of interest to him or her. For example, if Jane Doe is a gardener, she enjoys receiving gardening magazines and catalogs. If John Smith enjoys gourmet cooking, he would welcome receiving a catalog of the latest kitchen gadgets. These catalogs give the consumer great ideas and deals they wouldn't otherwise have. If we cannot get specific vehicle information, then we will be forced to take a more scattershot approach, which is a waste of money and resources. In the process, many people who don't want our catalog will get it anyway.

What harm is there to the consumer if this law goes into effect?

Safety and Convenience

Catalogs provide a consumer one-stop shopping for a wide variety of products. Products that improve the safety, fuel economy, and convenience of their vehicles.

—Safety products that we offer include a children's seat belt adjuster that makes it more comfortable for a child to use (which means the child will use it—and that saves lives), a backup alert that warns children when a vehicle is backing up, and products for people to keep in their vehicle in case of emergencies.

—We have several products that improve fuel economy, such as programmers that can actually reprogram a vehicle's computer to increase mileage up to 25 percent, products that create less wind drag and thus improve mileage, and improved air filters and air intake systems. All these items save fuel, which is extremely important with today's high fuel prices.

—Much appreciated convenience products include running boards that make it easier for an elderly person, or a mom with a baby, to get into their vehicle, as well as many items that make traveling easier.

One of the most common responses we get from our customers is "We didn't even know this product existed!" Unaware of the availability of our products, and of our need to know about their vehicle registration data, most of our customers probably would not have opted in had they been required to do so.

Restriction of Competition

If this vehicle information is not made available to responsible marketers, then the automakers will have a monopoly on direct marketing to consumers that buy their vehicles. We all know what happens in a monopoly situation. Prices increase and innovation decreases. We currently charge 30 percent to 50 percent less than the car manufacturers for the same products. Our marketing costs would increase substantially under this law and these increases would have to be passed on to the consumer. That's assuming we could even stay in business. If businesses like ours are not able to stay in business, then innovation will also surely decrease. Reduced competition always results in reduced innovation—ultimately the consumer is the one who gets hurt.

Increased Waste

If this law goes into effect, consumers will receive additional mail that is not specific to them. We will have to start mailing our catalog to consumers who might have the appropriate vehicle instead of being sure that we're putting our catalog in the right hands. This is a waste of paper and resources as well as additional expense and a true bother to more Americans.

What is the effect of this law on businesses, such as ours, and the people who are employed by them?

Effects on Employees

This industry, by its very nature of needing assemblers, packers, and data entry personnel, lends itself to hire unskilled employees who have a difficult time finding good jobs to support their families. At Stylin' Concepts, of those employees who have children, 50 percent are single parents, another 25 percent are students working their way through school, and others are handicapped. The call center where we receive calls from customers (we only receive calls, we never call prospective customers) is perfect for those who need flexible hours and a handicapped-friendly work environment that our company, and others like ours, offers. These people are trained well by us and all they want to do is keep their current job. The fact is, most of them will lose their job under the new law.

Effects on Business

The impact on our business and others like ours will be huge. We are aware of no other way to get this vehicle specific information. 75 percent of our business depends on it. The only way to maintain our sales would be to mail out 10 times as many catalogs, at an enormous increase in expense. Prices would have to be raised considerably, and frankly, we doubt that the consumer would be willing to pay the higher prices. Thus, the net effect would be to drastically reduce our sales and the sales of other businesses like ours.

What other options are available?

Other options to protect the privacy of the individual are available without hurting workers, consumers, and business. Some of these are:

1. Fine tune the law so that information that is truly private (such as driver's license photographs) is prohibited from sale, but allow the sale of information that would not unduly harm the privacy of the consumer and provide a benefit as well.

2. Create standards by which the information is used. As an example, responsible direct marketers, at their cost, provide easy and effective ways for the consumer to let the marketer know they don't wish to receive mailings anymore. Continue to let consumers opt out of allowing their information to be released. This seems to be a very effective method for communicating this information. Only .002 percent of consumers who receive our catalogs feel the need to contact us to request they not get our catalog.

3. At the very least, we need time to assess the impact this law will have on direct marketing workers and the businesses that employ them. Given time, we may be able to minimize the impact of the law. But right now, we can't, and too many people will be hurt.

We believe the opt-in choice, as stated in the law, is not a practical solution for this issue. Most states seem to believe the revenue received from this method would not offset the cost involved in the changeover. It would require costly changes to

their forms, procedures, and computer systems. The states are saying they will simply not make any data available anymore.

In summary, we agree the privacy issue needs to be addressed. We have no desire to send our catalogs to anyone who does not wish to have them. However, the impact of this law needs to be seriously considered before it's implemented. We urge you delay the implementation of this law until a sound economic impact study can be made, as too many innocent and responsible businesses, workers, and consumers will be hurt by this law as it currently stands. With some modification, the law can make great strides in protecting the consumer from release of sensitive information without hurting a great many companies and their employees.

PREPARED STATEMENT OF THE DISABLED AMERICAN VETERANS

My name is Max Hart and I am the Director of Fundraising of the Disabled American Veterans ("DAV"). The DAV is a membership service organization of more than one million members with an additional 177,000 Women's Auxiliary. Founded in 1920 and Chartered by Act of Congress in 1932, DAV carries on service programs for all of America's 2.3 million disabled veterans and their dependents. These services are totally funded by contributions from a generous American public raised 100 percent through the mail. Direct mail is the only medium through which we can sustain our program service-all others are not viable.

I appear before you today on behalf of both the DAV and the Direct Marketing Association Inc. ("The DMA"), of which we are a member. I serve as chairman of The DMA's Nonprofit Council, which consists of 290 nonprofit organizations and their suppliers with interests in raising funds through direct marketing. The National Easter Seals, the Arthritis Foundation, the American Cancer Society, the March of Dimes, and Consumers Union are among the organizations who are members of The DMA Nonprofit Council. With scarce resources with which to make our fundraising appeals, we all rely upon the ability to tailor our messages to specific audiences by using lists from databases. Many of these databases are updated and corrected through the use of motor vehicle record information.

DAV's 65 million fundraising solicitations last year raised 83 percent of the organization's total revenue. That is, the DAV's fundraising solicitations last year grossed $98 million in charitable contributions and $2.9 million in bequests, trusts, and gift annuities.

Motor vehicle records have proven to be one of the single most reliable sources of certain demographic information, including age information, which we use in our targeted fundraising. This information is particularly useful in narrowing our fundraising target mailings to individuals that fall within a particular age range. Through the use of age and other demographic information that originates in motor vehicle records, we are able to better ensure that our messages will be heard by the most responsive audiences.

The future success of our fundraising efforts depends, in large part, on continued access to information in the motor vehicle records. Requiring an opt-in for use of motor vehicle information potentially threatens the ability of charitable organizations to raise the sums they need to continue providing the services that they have traditionally offered. Total cut off of all marketing uses of motor vehicle records would only exacerbate the difficulties we will have in obtaining lists that contain data derived from motor vehicle records.

INTRODUCTION

Good morning, Mr. Chairman and members of the subcommittee. I thank you for the opportunity to appear before your subcommittee as it examines implementation issues surrounding positive notification requirements for the Driver's Privacy Protection Act ("DPPA").

My name is Max Hart and I am the Director of Fundraising of the Disabled American Veterans ("DAV"). I appear before you today on behalf of both the DAV and the Direct Marketing Association ("The DMA"), of which we are a member.

My remarks today will concentrate on the extent to which an opt-in requirement for marketing uses of motor vehicle records could drastically impact DAV's fundraising efforts and programs, and those undertaken by other nonprofit organizations. As I will illustrate, such an approach will effectively deprive nonprofits of vital information that is critical to the fundraising programs of many nonprofit organizations. A decision by the states to cut off all marketing uses of motor vehicle records rather than implement last year's changes only serves to exacerbate our problems with an opt-in requirement.

After providing a brief background on the work of both the DAV and the DMA's nonprofit council, I will explain: (1) how the DAV and other nonprofits use motor vehicle information to most effectively tailor our message in connection with fundraising efforts; and (2) the importance of continued access to lists developed using certain demographic information that is updated and corrected through the application of motor vehicle record information.

THE DAV

The DAV is a membership service organization of more than one million members with an additional 177,000 Women's Auxiliary. Founded in 1920 and chartered by Act of Congress in 1932, DAV carries on service programs primarily for the benefit of America's 2.3 million disabled veterans and their dependents. These services, provided free of charge to all veterans and their dependents, are totally funded by contributions from a generous American public raised 100 percent through the mail. Direct mail is the only medium through which we can sustain our service programs—all others are not viable.

The DAV was founded on the principle that this nation's first duty is to care for its wartime disabled veterans, their dependents, and survivors. In fulfilling our mandate of service to America's service-connected disabled veterans and their families, the DAV employs a corps of 260 National Service Officers (NSOs), located throughout the country. Last year, these men and women, all wartime service-connected disabled veterans, represented almost a quarter of a million veterans and their families in their claims for VA benefits, obtaining for them more than $2.2 billion in new and retroactive benefits.

We are extremely proud of the services DAV volunteers provide to our nation to assist it in fulfilling its mission to sick and disabled veterans. Between October 1, 1998, and September 30, 1999, these men and women continued to serve this great nation by providing more than 2.4 million hours of critical service to hospitalized veterans, saving taxpayers more than $35 million in employee costs.

The DAV also employs 187 Hospital Service Coordinators at VA facilities around the country to assist our nation's sick and disabled veterans and their families. The DAV transportation program provides essential transportation to and from VA health care facilities to those veterans who could not otherwise access needed medical care. As of September 30, 1999, DAV volunteer drivers transported more than half a million veterans more than 19 million miles to and from VA medical appointments during a 12-month period. From its inception in 1987, the DAV's National Transportation Network logged in nearly 200 million miles and transported almost five million veterans to VA health care facilities. Since our transportation program began in 1987, DAV has donated 890 vans at a cost of more than $17 million. This June, DAV will donate an additional 102 vans at a cost of $2.4 million.

As you can see, as we have done for the past 80 years, the DAV devotes its resources to the most needed and meaningful services for our nation's disabled veterans. These services aid veterans directly support and augment VA programs. We are able to do so only with the continuing support of an American public that is grateful for all that our veterans have done.

THE DMA NONPROFIT COUNCIL

The DAV is a member of The Direct Marketing Association. The DMA is the largest trade association for organizations and businesses interested in direct, database, and interactive marketing and electronic commerce. The DMA represents more than 4,600 companies in the United States and 54 foreign nations. Founded in 1917, its members include direct marketers from more than 50 different industry segments, as well as the non-profit sector.

As chairman of The DMA's Nonprofit Council, I preside over a body that consists of 290 nonprofit organizations and their suppliers with interests in raising funds through direct marketing. They include organizations such as the National Easter Seals, Arthritis Foundation, American Cancer Society, March of Dimes, Consumers Union, Special Olympics, and Boystown, just to name a few. Our reliance upon lists and databases to raise funds for our service programs is one of the things that all of these non-profit organizations have in common. A good many of these lists and databases are updated and corrected through the use of motor vehicle records.

These nonprofit organizations are among the thousands of DMA members who have signed on to the Privacy Promise. This initiative requires that, as a condition of membership to The DMA, companies participate in The DMA's mail and telephone preference services. These services are offered free of charge to consumers, giving them the ability to remove their names from the lists of national marketers, substantially reducing their unsolicited commercial mail and telephone marketing

calls. Members must provide notice to consumers if they transfer data to others and must provide the consumer with the ability to opt out of such transfers.

THE SERVICE PROGRAMS FOR ALL OF AMERICA'S DISABLED VETERANS AND THEIR DEPENDENTS ARE TOTALLY FUNDED BY CONTRIBUTIONS FROM DIRECT MAIL

Last year DAV mailed 65 million fundraising solicitations which grossed $98 million in charitable contributions and $2.9 million in bequests, trusts, and gift annuities. This figure represents 83 percent of DAV's total revenue from all sources including membership dues, investment income, and sale of fraternal items. Of the 65 million pieces mailed, 35 million were sent to DAV's 8 million active donors and 30 million to outside mailing lists prospecting for new supporters to DAV. Because we have an attrition rate of 20 percent each year, we need to replace 1.6 million donors in order to maintain the active donor file at its present level of 8 million.

As these figures attest, contributions from direct mailing activities are critical to ensuring adequate funding to support our service programs. The use of information from lists updated through the use of motor vehicle records is instrumental to achieving our fundraising goals, and to ensuring that we are able to continue to provide our services.

ACCESS TO CERTAIN INFORMATION GLEANED FROM MOTOR VEHICLE RECORDS IS CRITICAL TO ENSURING THE CONTINUED VITALITY OF MANY NONPROFIT SERVICE PROGRAMS THAT ARE DEPENDENT UPON DIRECT MAIL CONTRIBUTIONS

Although the DAV and other charities do not use driver's license and motor vehicle information directly, the ability to access lists from commercial databases with accurate and current information revealing particular demographics is extremely important to the nonprofit sector's fundraising efforts. Naturally, accurate name and address information is important. But so is demographic data. Accurate and complete data helps ensure that we direct our fundraising solicitations to the members of the public most likely to respond to them.

Motor vehicle record information is used in conjunction with other demographic data to identify the characteristics that distinguish an organization's best donor candidates. These characteristics are then applied against outside lists for new donor acquisition mailings. This is accomplished through predictive models and statistical regression analysis which are commonly used on large direct response lists such as Readers Digest subscription lists.

For example, our experiences indicate that age and income are two of the most significant selection criteria in the use of outside lists. The prime audience for most charities is the 50 years of age and older market. Also, our supporters are typically middle income; high and low income households have proven unproductive. Being able to identify individuals that fall within these age and income categories helps to ensure that our message is being most effectively communicated. List owners rely substantially upon motor vehicle records because they are excellent sources of both of these types of information.

Use of age information is also invaluable to fundraising efforts in determining when to propose planned giving as a means of charitable contribution. Our experience indicates that individuals over 70 years of age respond at a much higher rate on Gift Annuity promotions. It is most cost effective, therefore, to target this age range for this type of fundraising solicitation. Similarly, age information is also an accurate predictor of candidates likely to set up Charitable Remainder Trusts. As a pre-retirement function, individuals who fall within the early to mid-60's age range, often establish these trusts. Having access to age information enables us to more effectively our efforts to reach this segment of the population.

Through the use of this age information, the DAV and other charitable organizations are able to expend their limited fundraising resources in a cost effective manner by ensuring that we target our solicitations at the most responsive audiences.

Certain financial information gleaned from motor vehicle information also is important for fundraising associated with these Charitable Remainder Trusts. Because these trusts typically involve significant dollar amounts of $100,000 or more, the ability to target more affluent individuals helps contribute to a better response rate. Car model and year information have proven to be highly accurate indicators of wealth information. Owners of late year model Cadillac, Lincoln, Lexus, and BMW cars, in high income areas represent better prospects for larger trusts. The ability to access this information through the use of motor vehicle registration is thus an important tool in these efforts.

Our discussion so far has focused upon solicitations from new donors. But age and wealth information are also used to identify from an organization's own donors those individuals who are the best prospects for a "planned gift" (i.e., bequests, gift

annuities, and charitable remainder trusts). Organizations often overlay age information from a database where age is derived from driver's license information and wealth indicators where a part of the mathematical equation is the make and year information from vehicle registration information to help target their messages to the most responsive audience.

Based upon studies that show that a majority of Americans do not avail themselves of either opt outs or opt ins, we anticipate that last year's opt-in requirement will result in far less information being made available from motor vehicle records. This will make it more difficult for us to obtain the highly reliable demographic information available from motor vehicle records upon which we have come to rely, and erode the quality of the lists upon which we rely upon for fundraising. This in turn may require nonprofits and others to send greater volumes of less targeted solicitations to compensate for the loss of age and other predictor demographic data. This will raise our costs and will result in more of our solicitations directed at the wrong consumers. This, in turn, could adversely impact our ability to provide our services.

I understand that many states may decide to cut off all marketing uses of motor vehicle records rather than implement an opt in. This will only serve to exacerbate our problems because it will block off information from even those individuals who through an opt in would agree to the use of the data in their motor vehicle records for solicitation purposes.

CONCLUSION

The future success of our fundraising efforts depends, in large part, on continued access to information in the motor vehicle records. Requiring an opt-in for use of motor vehicle information potentially threatens the ability of charitable organizations to raise the sums they need to continue to provide the services that they have traditionally offered. Total cut off of all marketing uses of motor vehicle records would only exacerbate the difficulties we will have in obtaining lists that contain data derived from motor vehicle records.

PREPARED STATEMENT OF FINANCIAL SERVICES, INC.

Mr. Chairman, Members of the Committee, I am Charles W. Taylor, President of Financial Services, Inc. d/b/a www.vidnet.org. Thank you for this opportunity to present our statement in support of the Video Conferencing and Telecommuting in the 21st Century—Test and Evaluation, proposed for the U.S. Department of Transportation (USDOT). I want to share with you our thoughts about an undertaking that can produce significant savings in USDOT travel expenses, traffic congestion relief, improvements in public safety, as well as contribute to the economic future and quality of life for federal employees and the public of our region and nation.

Significant improvements this past summer and fall in video conferencing—telecommuting, and distance learning technology have been made, particularly with the user interface and ease of connection, which now make it possible for just about anyone to use this technology. Cost wise, on the low end, a desktop or laptop personal computer (PC) can be video conference—telecommute enabled for less than $100, bringing the user cost within the reach of just about everyone.

My technology will allow each user to easily see, talk with, collaborate, and share data in real time with up to a dozen other people, or more, at the same time on their own video conference—telecommute enabled desktop/laptop PC, from their offices, homes, or where ever, regardless of their location, worldwide via network, Internet, or both, essentially by clicking on a web page link.

My proposal is to equip and enable a minimum of 1,000 USDOT desktop and/or laptop PC's for high quality video conferencing and telecommuting capability. The cost to enable video conference/telecommute capability per desktop/laptop PC is expected to be between $100.00 and about $400.00 each, depending on user preferences, quality of service needs, and USDOT system requirements. The system proposed includes desktop/laptop PC software, color digital PC cameras, PC telephony devices (i.e. microphones or headsets), servers, server software, and could enable IP broadcast capability to a USDOT web page, if desired, on an internal or external, secure, USDOT network.

According to an analysis I completed earlier this year, assuming a 2 hour round trip commute, telecommuting only one day per week would save a worker about 100 hours on the road, and about $250.00 in out of pocket travel expenses over a year's time. A recent study by MCI-Worldcom, "Meetings in America," suggests that for an average business meeting, an employer would save over $1,000.00 per employee, per meeting, if the employee used video conferencing instead of the traditional face to

face—travel and time intensive method. In addition, according to the study, the employer would recoup more than 12 hours in lost productivity per employee, per meeting due to meeting travel and preparation time savings. On an annual basis, video conferencing has demonstrated a cost benefit ratio of about 4 to 1.

In addition, low cost desktop video conferencing has particular mobility implications for our elderly, homebound, travel limited, and isolated persons. This new technology now makes it possible to see, hear and talk with a dozen other people, or more, share text and data, and collaborate on projects with business associates, neighbors, friends, and relatives . . . or take a course at a world class university . . . without leaving the home, or from any location worldwide.

For our men and women in uniform, who must spend months away at sea and in foreign lands defending our freedoms, they will now be able to see, hear, talk with, and visit with their loved ones, friends, and relatives, no matter where they are. They deserve no less.

My technology is proven. In fact, the proposed server software was recently selected as part of the US Army's—First Data Division—command and control communication system upgrade for it's superior performance, lip sync quality, and ability to link servers for world wide connectivity.

The Internet is no longer faceless, nor silent.

Given the high cost of fuel, horrific traffic congestion, and extraordinary travel costs, it seems to me that it is long past time to consider proven, cost effective technologies as part of the transportation solution.

Secretary Slater has said that transportation is more than "asphalt, concrete, and steel." We've talked the talk. It's time to walk the walk.

The attached materials describe systems proposed. Additional information is available on my website: WWW.VIDNET.ORG.

Thank you for the opportunity to present this statement. I would be pleased to answer any questions you may have.

FEDERAL TRANSIT ADMINISTRATION

PREPARED STATEMENT OF THE ELECTRIC VEHICLE ASSOCIATION OF THE AMERICAS

INTRODUCTION

This testimony is submitted on behalf of the Electric Vehicle Association of the Americas (EVAA or Association), a national non-profit organization of electric utilities, automobile manufacturers, state and local governments and other entities that have joined together to advocate greater use of electricity as a transportation fuel. A membership list is attached.

THE ROLE OF ELECTRICITY IN THE NATIONAL TRANSPORTATION SYSTEM

The Association believes that utilization of electricity offers significant advantages in transportation applications. Electric transportation technologies present our nation with an important means for reducing our dependency on foreign petroleum and increasing the diversity of fuels relied upon in the transportation sector. During the last gasoline price and availability crisis in 1973, the United States was only 36 percent dependent on imported oil. Today, the U.S. Department of Energy reports that net imports of petroleum in the year 2000 will account for 52 percent of total U.S. petroleum demand. Clearly the need for this country to transition to the use of alternative fuels is more critical than ever. According to the Energy Information Administration (EIA), crude oil prices have pushed regular gasoline prices to $1.50 per gallon, the highest level in nominal terms since 1981. (In fact, EIA predicts that average retail gasoline prices could reach a monthly average of $1.75–$1.80 per gallon some time during the summer peak driving season.) A wide variety of transportation modes—individual passenger and light-duty vehicles; heavy-duty vehicles, like buses and trolleys; light rail; commuter rail; maglev technologies, high speed rail; and heavy rail services—can be powered by electricity—an abundant, clean, and domestically produced energy resource generated from a variety of sources. All of these technologies will reduce pollution, reduce our dependency on imported oil, and improve the quality of life in many of our cities and towns, while maintaining our high degree of mobility.

In addition to diversifying sources of transportation "fuels", air quality considerations also are requiring municipal transit operators to consider the use of alternative fuel technologies as a means to reduce emissions and achieve air quality goals. For many urban areas, electric transportation may be a particularly important means to substantially reduce emissions of mobile source pollutants, including

volatile organic compounds and oxides of nitrogen, that are the precursors of smog. Electric vehicles, electric buses and maglev technologies are truly "zero emission" transportation modes in operation. They produce no tailpipe emissions and generate insignificant emissions during operations. They also have the benefit of being very quiet and energy efficient.

FEDERAL PROGRAM TO SHOWCASE ELECTRICITY AS THE 21ST CENTURY INTERMODAL FUEL

The EVAA supports the establishment of a significant federal program to demonstrate the environmental, energy security and economic benefits of alternatively fueled, intermodal transportation networks in our nation's urban centers. Vehicular traffic in "center city rings" has become a significant environmental and transportation problem not just in the U.S., but around the world. Global trends toward increased urbanization mean that current problems associated with transporting people and goods will worsen. In Europe, Mexico and parts of Asia, cities are imposing drastic measures; closing center city rings to all vehicular traffic and/or imposing "no drive" days. In the U.S. local officials and transportation authorities are examining various means to relieve congestion, reduce emissions and noise from the transportation sector, while still assuring urban residents and commuters convenient and ready mobility.

The Association believes an industry and government partnership should be created to demonstrate that people and goods in urban areas can be moved cleanly, quietly and efficiently without using petroleum. To demonstrate the versatility of electricity, and more importantly, to focus upon alternative clean, efficient mechanisms to quickly move people and goods in our country's urban centers, the EVAA recommends the authorization and funding of a nationwide intermodal transportation program. This national effort should be designed to demonstrate the environmental, energy security and economic benefits of creating electric-powered intermodal transportation networks in urban centers. Such a program would provide highly visible ways to demonstrate emerging technologies; evidence the value of electric-powered transportation options in creating "livable communities"; address urban sprawl; and, encourage sustainable development and "smart growth". Examples of model projects could include the use of electric bikes and neighborhood electric vehicles by police and/or parking enforcement officials; the use of electric/hybrid electric buses for mass transit; EV "station car" connections to electric commuter rail; and/or the use of electric ground support vehicles, shuttle buses and/or EV rental car demonstrations at airports.

As envisioned, the proposed program would encourage energy diversity by showcasing a variety of transportation modes in several demonstration projects around the U.S. Such a program also would further determine the best applications for many of these emerging clean technologies. The demonstration program also would support the increased development/use of supporting infrastructure which will assist communities both in the near and long-term as they continue to transition to the use of clean, alternative transportation modes.

EVAA SUPPORTS THE FISCAL YEAR 2001 BUDGET REQUEST FOR THE CMAQ PROGRAM AND THE CLEAN FUELS FORMULA GRANT PROGRAM

It is vitally important to fund transit programs, which encourage innovative technological development with regard to electric, hybrid-electric and fuel cell transportation applications. Therefore, the Association urges funding—to the fullest extent authorized under the Transportation Equity Act of the 21st Century (TEA–21)—of public transit programs. In particular, the Association encourages funding for the following:

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The CMAQ program provides critical funding for projects and programs that reduce transportation-related emissions in nonattainment and maintenance areas. EVAA encourages DOT to give priority to those projects that have the greatest positive impact on air quality. An important dimension to the CMAQ program is the Public/Private Partnership Program that provides a mechanism through which the private sector may access CMAQ funding. The Association is supportive of full funding for the CMAQ program.

Clean Fuels Program

In TEA–21, Congress authorized a $60 million electric and hybrid electric bus deployment program as part of the Federal Transit Administration's (FTA) Clean Fuels Formula Grants program. During the fiscal year 1999 and fiscal year 2000 appropriations processes, funding for the Clean Fuels program was merged with

funding for the bus and bus-related facilities program. Combining these programs allowed Congress, during the appropriations process, to substantially increase the pool of authorized funds that could then be designated to specific projects. The Association encourages the Committee to appropriate funds, as authorized, for the conduct of competitive solicitations to test and demonstrate electric and hybrid electric buses.

The EVAA also believes that it is important for the Federal Transit Administration to issue guidance on the implementation of the Clean Fuels Program. The issuance of guidance documents would help to focus attention on the jeopardy to technology development if projects are designated specifically for funding and then implemented without regard to standards, common goals or technology transfer.

CONCLUSION

The Association appreciates the opportunity to make its concerns known to the Subcommittee and to submit for the record its funding priorities for the upcoming fiscal year.

PREPARED STATEMENT OF THE REGIONAL TRANSPORTATION COMMISSION OF CLARK COUNTY, NEVADA

INTRODUCTION

The Regional Transportation Commission of Clark County, Nevada (RTC) is pleased to have the opportunity to submit this testimony to the Transportation Appropriations Subcommittee in support of our fiscal year 2001 funding requests.

The RTC is a public entity created under the laws of the State of Nevada with the authority to operate a public transit system and administer a motor fuels tax to finance regional street and highway improvements. In addition, the RTC is the Metropolitan Planning Organization (MPO) for the Las Vegas Valley. As the public transit provider, the RTC operates Citizens Area Transit (CAT), a mass transit system that now carries more than 51.6 million annual passengers and recovers nearly 50 percent of its operating and maintenance costs from the farebox.

COMMUNITY

The Las Vegas community is currently home to over 1.3 million permanent residents. With 17 of the world's largest resort hotels adding over 32 million annual visitors, the actual population of Las Vegas on any given day exceeds 1.5 million persons. Meanwhile, the Las Vegas metropolitan area continues to experience explosive growth. The economy of the Las Vegas Valley is characterized by a favorable business environment, a strong job market, an absence of a business and personal income tax, and a comparatively low property tax by national standards. This environment has fostered an era of extraordinary growth that, since 1990, has fueled the creation of over 175,000 new jobs and has witnessed the influx of over 500,000 new residents to the valley. Current projections indicate that population and employment will continue to increase, exceeding 2.1 million residents and over 1 million jobs by the year 2020. Ensuring adequate mobility is essential to maintaining a superior quality of life for residents and a pleasant visitor experience.

CITIZENS AREA TRANSIT

Citizens Area Transit (CAT) began service on December 5, 1992. At that time, CAT represented the largest single start-up of new bus service in North America. Annual CAT ridership has grown from 14.9 million riders in 1993 to over 51.6 million riders in 1999; a growth rate of over 246 percent in only 7 years, catapulting CAT to the 25th largest bus system in the nation. Las Vegas is the fastest growing city in the United States, but the CAT system is growing at a rate faster than any other local economic indicators, including population, employment, hotel rooms, visitor volumes, airport passengers, vehicle miles traveled, and auto registrations.

With 42 routes operating throughout the greater Las Vegas Valley, as well as routes in the rural communities of Laughlin and Mesquite, Nevada, CAT is now servicing over 4.5 million passengers per month. While the CAT routes operating along the high-profile Las Vegas Boulevard provide service to up to 900,000 passengers per month, these routes account for only 25 percent of the total monthly ridership. Clearly, many Las Vegas residents rely heavily on the CAT system to get to work, school, shopping, medical services and recreational facilities. Providing mass transit services throughout the Las Vegas Valley, CAT has become essential to the fabric of the Las Vegas community.

To address the ever increasing demand for transit services, the RTC has continually increased bus service. Since startup, total annual hours of revenue service have almost doubled, from 585,134 hours in 1993 to over 1.1 million hours in 1999. Similarly, annual vehicle miles have also doubled; from 6,384,660 miles in 1993 to over 14,500,000 miles in 1999. In addition, the CAT system has continued to successfully increase ridership while remaining operationally efficient. Costs per passenger have dropped consistently since startup, to approximately $1.29 per passenger. In 1997, CAT was recognized by the American Public Transit Association (APTA) as the winner of the Outstanding Achievement Award—Bus System of the Year for the 151–600 bus category. In 1998, and again in 1999, APTA again recognized the CAT system by awarding it the William T. Coleman Silver Safety Award for outstanding performance in traffic and passenger safety. For the past four years, the annual University of North Carolina, Charlotte Comparative Performance Report has also recognized CAT as one of the nation's top bus systems in terms of system performance.

Although the CAT system has doubled service availability since startup, the demands for even more service continue to escalate. The urban boundaries of the Las Vegas Valley continue to push in all directions, creating new areas of growth and transit demand. In addition to under served areas, the frequency of service on most existing routes serving the residential base of the valley is substantially less then desired. The single largest constraint faced by the RTC to providing more service continues to be fleet availability. When compared to other peer cities, CAT transports up to 3 times the number of passengers per vehicle.

BUS PASSENGER FACILITIES (HENDERSON INTERMODAL FACILITY)

The RTC is requesting $6 million in Section 5309 bus discretionary funds for land acquisition and facility construction for an Intermodal facility located in Henderson, Nevada.

With over 51.6 million annual passengers using the CAT system, passenger comfort and convenience are essential components to maintaining transit's viability as an alternative mode of transportation. To enhance customer amenities and facilitate transfers between routes, the RTC plans to build a network of terminal/transfer facilities throughout the Las Vegas Valley. These facilities will provide locations where passengers have the opportunity to easily transfer between routes, passengers have shelter from the elements, and coach operators have access to necessary amenities. In addition, terminal/transfer facilities will provide opportunities for a reasonable interface between fixed route and paratransit services. In addition to the Downtown Transportation Center (DTC), the RTC is in the process of siting a second terminal transfer facility at the southern end of the Las Vegas Strip. An Environmental Analysis has been performed on the South Strip site and RTC has received a Finding Of No Significant Impact (FONSI) on the site. RTC is now engaged in the land acquisition process and will soon be moving forward with final site design and construction.

In the southeast area of the Las Vegas Valley, five CAT routes provide services in the Henderson area. Until recently, these five routes utilized private property belonging to a local casino as a "de facto" terminal area. However, new ownership at the property recently refused CAT's continued use of the property. Currently, the five CAT routes are now using on street parking as a layover/transfer area, with no nearby amenities or facilities. Clearly, a dedicated facility in the Henderson area has become a priority for CAT services.

RTC has issued an RFP for consulting services to locate an appropriate site for a dedicated CAT terminal in Henderson, as well as to perform all necessary environmental analysis. By the end of calendar year 2000, a preferred site will be identified. Acquisition and construction funding will allow RTC to proceed with this project as expediently as possible.

BUS RAPID TRANSIT AND EMERGING TECHNOLOGIES

The RTC also requests $7 million in Section 5309 bus discretionary or Research and Technology funds for the implementation of a Bus Rapid Transit (BRT) project in the Las Vegas Valley.

Overall ridership on CAT has increased by over 246 percent since its inception in 1992 and some CAT routes have shown even greater increases, operating in excess of 200 percent of available capacity. This significant ridership demand, coupled with the unique Las Vegas environment and climate, create a distinct opportunity for the implementation of new bus technologies and transit services.

The RTC is interested in the use of new and innovative technologies to improve capacity, increase efficiency, and meet the ever increasing needs for mass transit in

the Las Vegas Valley. Toward this end, the RTC is beginning the process of planning for the deployment of new Bus Rapid Transit services. Specifically, RTC is developing operational plans to deploy a high capacity vehicle with low floor accessibility, perimeter seating, and off vehicle fare collection. In addition, RTC is focusing on emerging technologies that utilize alternate fuels and provide opportunities to reduce roadway spaces and minimize costly traffic engineering improvements. From a research perspective, the most significant element of the BRT project is the potential usage of an automated guidance system. This guidance system will assist coach operators in the approach to a bus stop and aligning the actual stopping point of the vehicle at the bus stop. The service advantages of such a system in BRT operations include maintaining close curb distances, ensuring that vehicle doors are aligned with loading/exiting areas, and eliminating gaps between the vehicle and the platform stopping area.

The development of a reserved right of way for bus rapid transit technologies is a new concept for the Las Vegas Valley. Las Vegas Blvd North has been identified for the project due to the high demand for transit in this corridor, the available right of way, as well as the ability to determine the impacts of the reserved lane on automotive traffic. In fact, CAT route 113 which serves Las Vegas Blvd North is a key link in getting workers to the new jobs being generated in the rapidly growing resort industry.

FLEET EXPANSION—CLEAN FUEL VEHICLES

The RTC requests the sum of $6 million in Section 5309 bus discretionary funds or Clean Fuels program funds for the purchase of 25 CNG powered 40 foot vehicles to be dedicated to fixed route service. The CAT fleet consists of 297 fixed route vehicles and 120 CNG powered Paratransit vehicles. In its role as the MPO and transit operator, the RTC is constantly promoting additional methods to help improve air quality. When CAT paratransit services were initiated in December 1994, the RTC mandated the entire paratransit fleet use an alternative fuel. As a result, the RTC is currently the largest single sponsor of an alternative fuel fleet in the State of Nevada. The RTC directly contracts with a CNG wholesaler for the purchase of CNG fuel at the lowest possible cost.

In 1999, the CAT fixed route fleet provided over 14,500,000 miles of revenue service throughout the Las Vegas Valley. The fixed route fleet currently provides almost double the operating miles per vehicle than most other transit agencies. In addition to the need for vehicles for fleet expansion, RTC aims to diversify the fixed route fleet to also include alternative fueled vehicles.

FIXED GUIDEWAY

The RTC is requesting $2.5 million in Section 5309 new starts funding for continuing environmental studies and engineering for the Resort Corridor Fixed Guideway project. During the past year, the RTC continued to engage in project definition activities, technical studies in support of an environmental document, and preliminary engineering activities. Most notably, the RTC adopted a Financial Plan that utilizes STP and CMAQ funds, and capitalizes on local private equity investments and the expected substantial ridership levels and revenues.

CONCLUSION

The Subcommittee has been very helpful in the past in recognizing the ever increasing transit needs in Clark County. Consistent with that past history, the RTC requests that the Subcommittee give positive consideration to the projects described in this testimony. Specifically, the RTC requests funding from Section 5309 in the amount of $6 million for Bus Passenger Facilities; $7 million for a Bus Rapid Transit emerging technology project, $6 million for transit bus alternative fuel fleet expansion, and $2.5 million for continuing activities related to the Resort Corridor fixed guideway project. As shown in this testimony, these projects are indispensable to the comprehensive development of an integrated intermodal transportation system capable of meeting the needs of the fastest growing city in the United States.

PREPARED STATEMENT OF THE DALLAS AREA RAPID TRANSIT AUTHORITY

Senators Kay Bailey Hutchison and Phil Gramm jointly submit this written testimony on behalf of the Dallas Area Rapid Transit (DART) Authority. It is indeed a pleasure to reaffirm our support of DART and to recommend to the Subcommittee their fiscal year 2001 appropriation request of $100 million for the North Central Light Rail Transit (LRT) Extension, purchase of transit buses, aquisition of property

for the Southeast Corridor, and DART's ITS Program. The request is for inclusion in the Federal Transit Administration (FTA) and the Federal Highway Administration Intelligent Transportation Systems portion of the fiscal year 2001 Department of Transportation and Related Agencies budget.

For fiscal year 2001, DART is requesting from the Federal Transit Administration (FTA) discretionary funding program, $70 million for the North Central Light Rail Transit (LRT) Extension, which is an installment of the $333 million Federal Share for the North Central Corridor Full Funding Grant Agreement between DART and FTA. The $70 million of New Start funds will be dedicated to the North Central LRT Extension of the 20-mile DART LRT Starter System. The funds will be used totally for construction elements, light rail vehicles, and real estate. Completion of the 12-mile North Central LRT Extension and the companion 12-mile Northeast LRT Extension (100 percent local funds) will more than double light rail coverage, to 44 miles, and penetrate the DART suburban cities of Richardson, Plano, and Garland.

DART is requesting $10 million in FTA capital funds for the purchase of transit buses. DART's Business Plan approves the multi-year replacement of 740 buses under three contracts. The first contract has been awarded for 489 buses which are currently being delivered to DART. In fiscal year 2000, two additional contracts will be awarded for the remaining 251 buses with deliveries in fiscal year 2001. The $10 million appropriation will be immediately obligated and expended for the fiscal year 2001 bus deliveries.

Nine stations are planned for the Southeast Corridor of DART's LRT System Project, seven of which will require the acquisition of additional real estate in order to provide for patron parking areas and/or busbays. The acquisition of this real estate is estimated to cost approximately $10 million. DART is requesting $10 million for property acquisition.

DART's approved Transit System Plan calls for deployment of Intelligent Transportation Systems (ITS). DART is requesting $10 million from the Federal Highway Administration Intelligent Transportation Systems funding program.

WHY THE SUBCOMMITTEE SHOULD APPROPRIATE $100 MILLION TO DART

Full Funding Grant Agreement Approved.

—DART and FTA agreed on a $333 million Federal Share for the North Central Corridor.

—The President's fiscal year 2001 FTA budget contains a line item of $70 million for the North Central Corridor, which is an installment of the $333 million Federal Share for the North Central Corridor Full Funding Grant Agreement between DART and FTA.

The North Central LRT Extension is under construction.

—The $70 million is needed immediately to meet cash flow requirements for contracts authorized under a FTA Letter of No Prejudice (LONP).

—DART has already awarded contracts totaling more than $298 million for the NC–3 Line Section, 21 new light rail vehicles, real estate, welded rail and fasteners, special trackwork, the vehicle maintenance facility, and yard expansion.

—By the end of fiscal year 2000, virtually all the contracts, valued at close to $1 billion for both the North Central and Northeast (100 percent local funds) LRT Extensions will have been awarded.

DART initiated construction before executing the Full Funding Grant Agreement because of a citizen-approved sales tax.

—The citizens of the DART service area in 1983 voted to impose a 1 percent sales tax dedicated to DART for public transit.

—A total of $3.18 billion has been collected through December 31, 1999, with $332.7 million received in fiscal year 1999.

—DART uses sales tax receipts and short-term borrowing to finance the initiation of construction; but, The timely receipt of federal funds is critical to repaying these short-term notes and minimizing the additional expenses associated with borrowing funds before receipt of the federal funds.

DART continues to overmatch.

—The $860 million LRT Starter system was financed with 19 percent ($160 million) federal and 81 percent ($700 million) local DART funds.

—The combined $992 million construction cost of the two LRT extensions continues DART's philosophy of providing a substantial local overmatch, as was done on the LRT Starter System.

—DART local funds ($659 million) represent 66 percent of the total project cost, with federal discretionary new start funds accounting for just $333 million (34 percent).

Solid elected official and business support.

—Richardson Mayor Gary Slagel, Dallas Mayor Pro Tem Mary Poss, and several business executives DART member cities have met with most of the Delegation Members to voice their strong support for the investment DART is making to bring major mobility improvements to North Texas.

—DART member cities and service area chambers of commerce have shown their support by writing letters and passing supporting resolutions.

—DART, the City of Richardson, Hunt Petroleum, and Northern Telecom are incorporating a rail transit plaza in the Galatyn Park expansion of the Telecom Corridor.

DART is an economic engine to North Texas and the state.

—DART is providing a hefty boost to the North Texas and state economies, with a total regional impact estimated at $3.7 billion and more than 32,000 jobs through 2003.

—The new study prepared by the Center for Economic Development and Research at the University of North Texas looks at three separate DART economic engines: the current $1 billion light rail expansion, other capital projects, and ongoing DART operations.

DART rail boosts property values and retail sales.

—Values of property near DART light rail stations are 25 percent higher than for similar properties not served by the growing rail system, according to a new study. DART has also helped occupancies and retail sales, especially in Downtown Dallas.

The LRT Starter System was built on time and within budget.

—DART has shown that it can capably manage a large, multi-million dollar project, keep it on schedule and within budget through strong project management and strict cost control.

—DART has proven to be a cost-effective manager of both local and limited federal funds through conservative financial policies instituted and approved by the DART Board.

Since the opening of Light Rail in June 1996, private developers have invested more than $800 million of private funds along the 20-mile Light Rail System.

SUPPORTING INFORMATION

Major Accomplishments

DART operates a highly successful 20-mile light rail transit system within Dallas, and a 10-mile commuter rail line between Dallas and Irving. In addition to the rail services, DART operates a variety of transportation alternatives including high occupancy vehicle (HOV) lanes, 130 bus routes, paratransit services for the mobility impaired, rideshare programs and corporate trip-reduction programs. These multimodal systems are the result of thorough corridor planning and implementing the right mode to match the corridor characteristic and ridership. A mix of high capacity systems is being implemented and operated in the Dallas area. This mix includes HOV lanes that are planned, designed, built, and operated in partnership with the Texas Department of Transportation.

Exceeding Expectations

DART's new LRT and commuter rail services are generating ridership well beyond initial projections, with more than 41,000 passengers per day. DART rail is generating extensive economic development around stations and along rail corridors as it increases mobility choices for workers. Consequently, business and community leaders are actively supporting efforts to expand the rail system in a timely manner, in accordance with the DART Transit System Plan. The citizens of North Texas are eager for DART to complete these major transportation projects in a timely and fiscally responsible fashion.

DART Rail Generates Major Real Estate Impact

The investment in DART is paying off. Through early 2000, more than $800 million in private funds has been invested in development along DART's $860 million, 20-mile Light Rail Starter System. Throughout the DART Service Area, investors and developers are following DART rail lines for the fastest track to successful developments.

DART is an economic engine to North Texas and the State of Texas

According to a February 1999 study prepared by the Center for Economic Development and Research at the University of North Texas, DART is providing a hefty boost to the North Texas and state economies, with a total regional impact estimated at $3.7 billion and more than 32,000 jobs through 2003. The study looks at

three separate DART economic engines: the current $1 billion light rail expansion, other capital projects, and ongoing DART operations. Quoting from the study, "By any measure, DART is a key economic engine for the North Texas region, generating jobs and economic activity just in the amount of money it spends on building new facilities and operating activities. If we factored in the benefits DART brings by providing inexpensive transportation to work and improved traffic and air quality, the number would be even higher."

Miles to Go

DART's Transit System Plan calls for the development of 93 miles of light rail, 22 miles of commuter rail, and 110 miles of HOV lanes. The Financial Plan portion of the fiscal year 1999 Business Plan projects the sources and uses of funds for DART's projects through the next 20 years. The Financial Plan projects $7.3 billion in locally funded operating expenses and a total of $4.6 billion in capital costs. Because of DART's one-cent sales tax, it has been Board policy to use the local funds for transit operations and DART has never sought or received Federal operating assistance. Therefore, federal funding accounts for only 19 percent of capital investments and 9 percent of overall expenditures.

CONCLUSION

The citizens of the DART service area have invested their sales tax dollars to implement the Transit System Plan. The $100 million request is realistic based on the Board-approved DART fiscal year 1999 Business Plan, which also has been examined by many of the finance directors of DART's member cities.

As the Subcommittee deliberates the hundreds of funding requests, remember:

—DART and FTA agreed on a $333 million Federal Share for the North Central Corridor.
—The North Central LRT Extension is under construction.
—$298 million in contracts have been awarded.
—DART initiated construction before executing the Full Funding Grant Agreement, because of sales tax revenues.
—DART continues to overmatch (66 percent local, 34 percent federal).
—There is solid elected official and business support.
—DART is an economic engine to North Texas and the State of Texas.
—The LRT Starter System was built on-time and within budget.

These are very compelling reasons to honor DART's $100 million request that has our complete support. We urge your endorsement of DART's fiscal year 2001 funding request of $100 million in order to keep the momentum we have collectively gained. DART is planning, building, and operating transportation services now for the future mobility of the region.

PREPARED STATEMENT OF THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) AND THE DENVER REGIONAL TRANSPORTATION DISTRICT (RTD)

Mr. Chairman and members of the subcommittee, we appreciate this opportunity to submit written testimony, as prepared by the Colorado Department of Transportation (CDOT) and the Denver Regional Transportation District (RTD), to discuss important transportation issues in the Denver metro area. It is with pleasure that we present to you our fiscal year 2001 Transportation Appropriation needs.

First, we want to thank you for the subcommittee's continued support for the Denver Regional Transportation District's Southwest Corridor Light Rail Project. The project is scheduled to open July 2000. Its Full Funding Grant Agreement (FFGA) requires a final appropriation of $20.4 million to complete the project's federal funding, and we would urge you to provide these remaining funds. It is a project that is on time and on budget.

Second, we are grateful for the $2.94 million in funding you provided in fiscal year 2000 for the Southeast Corridor. These funds were used for preliminary engineering. An appropriation of $63 million is requested for the Southeast Corridor Multi-Modal Project for fiscal year 2001. The Southeast Corridor Multi-Modal Project team is working aggressively to meet project readiness criteria, as established by the Federal Transit Administration (FTA), so that an approval of the FFGA can be accomplished by the summer of 2000.

The $63 million requested in fiscal year 2001 for the Southeast Corridor Multi-Modal Project light rail transit line will cover critical right-of-way acquisitions, early utility relocation, and critical items for federal funding. Last November, voters overwhelmingly approved both state and local bond initiatives to provide local funding

for the multi-modal project to decrease traffic congestion on Denver's transportation system.

There are two elements to this multi-modal project—highway and transit. The highway element of the project will include additional lanes and safety single project, single design and single construction improvements. The project will also include 19 miles of new double-track light rail which will run on the west side of Interstate 25 for 15 miles from the existing Broadway station in Denver to Lincoln Avenue in Douglas County and within the median of Interstate 225 for four miles from Interstate 25 to Parker Road.

The Southeast Corridor Multi-Modal Project connects the two largest employment centers in the region and the State. Together the Denver Central Business District and the Southeast Business District employees over 230,000 people. The Southeast Business District alone generates 25 percent of the annual sales revenue of the State.

The Southeast Corridor Multi-Modal Project is a joint effort and partnership of four agencies. Interagency agreements are in place between CDOT, RTD and additionally between the Federal Transit Administration and the Federal Highway Administration. It is a single design and single construction of both highway and transit. We are working cooperatively and collaboratively together on a "ONE DOT" approach to ensure that we deliver this project on time and within budget.

Completion of the Southeast Corridor Multi-Modal Project is vital in helping Colorado address the challenges we face from rapid growth. Moving forward with the Multi-Modal Project will go a long way in demonstrating the Federal Government's commitment and support for communities that look toward the future in meeting the long-term mobility needs for the people of Colorado. We seek your support for our fiscal year 2001 Appropriation Requests of $20.4 million to complete our FFGA for the Southwest Corridor Light Rail Project and $63 million for the Southeast Corridor Multi-Modal Project.

Mr. Chairman and members of the subcommittee, we thank you for this opportunity to provide you with this written testimony regarding these significant Colorado transportation projects.

PREPARED STATEMENT OF THE CHATHAM AREA TRANSIT AUTHORITY

Mr. Chairman and Member of the Subcommittee, on behalf of Chatham Area Transit Authority (CAT), I appreciate the opportunity to present this statement in the hearing record for outside witnesses.

First I would like to thank the Subcommittee for the funds provided over the past four years for CAT's transit needs. CAT officials and riders sincerely appreciate your efforts on our behalf.

At this point, it is anticipated that CAT will obligate the bulk of prior year appropriations before the end of this calendar year.

For fiscal year 2001, CAT is requesting $8 million for (1) Renovation and refurbishment of CAT's existing administrative and service/repair facility ($1,000,000); and (2) Desperately needed bus replacement funds ($7 million). In addition, CAT requests that $750,000 be allocated to the CAT system under the Access to Jobs provisions of the fiscal year 2001 Transportation Appropriations Bill. Each component is discussed below.

CENTRAL FACILITY REPAIR

The CAT central facility, which houses both administrative offices and our bus repair and service functions, is in desperate need of renovation and refurbishment. The facility has not received any major improvements since CAT began operating from this location in 1984. The needed improvements include the following: Safety and Code improvements; Lighting and security improvements; Utilities upgrades (water and natural gas); Pavement repairs; Improved operational sequence; Drainage improvements; and Roof repairs.

BUS REPLACEMENT

Currently over half of CAT's bus fleet have accumulated over 500,000 miles per vehicle. This puts these buses beyond their useful and designed life. None of the buses that require replacement meet the requirements of the Americans with Disabilities Act (ADA). The fiscal year 2000 Appropriations of $2.5 million for the beginning of CAT's bus replacement needs will permit less than 50 percent of the replacement goal to be met. As each year passes, the percentage of CAT's bus fleet that becomes outmoded increases significantly. The total funding needed to replace

these buses is now in excess of $12 million. CAT is seeking $7 million of the total need in fiscal year 2001. Without this infusion of additional funds for escalating bus replacement needs, CAT will (1) fall behind capability to deliver existing service to our riders, much less meet the growing ridership demand we have been experiencing for the past three years, and (2) fail to provide service required under the Americans with Disabilities Act.

ACCESS TO JOBS

CAT provides transportation to and from work for a large segment of the service area. The use of mass transit for these purposes makes CAT eligible for additional funding under the Job Access funding category. In prior years, this category had been available on an application basis. Recently, only those systems identified in the appropriations conference agreements have been recipients of these funds. In fiscal year 1999, CAT received a competitive grant for access to jobs. These funds are used under a public/private partnership to provide transportation to CAT riders traveling to and from work. These funds will expire soon, and the community has expressed its desire to maintain this program. CAT requests that $750,000 be identified for CAT in this funding category for fiscal year 2001.

CONCLUSION

Mr. Chairman, thank you for this opportunity to present CAT's needs before your Subcommittee. CAT's Board and I thank you for your efforts on CAT's behalf last year. We earnestly and sincerely request that you consider carefully CAT's defensible and justifiable request for $8 million for buses and bus related facilities, and $750,000 for Access to Jobs from the Federal Transit Administration for fiscal year 2001.

PREPARED STATEMENT OF THE CITY OF MIAMI BEACH, FLORIDA

Mr. chairman and members of the Transportation subcommittee: On behalf of Miami Beach, I thank you for the opportunity to present testimony to the subcommittee.

The City respectfully submits a transportation-related project for a discretionary earmark through the Federal Transit Administration, within the fiscal year 2001 transportation appropriations bill. The City-proposed earmark of ten million dollars will be used toward the construction of a storage and maintenance facility/intermodal transit station that will support the existing and future electric shuttle service, known as the electrowave. FTA funds may also be used for right-of-way acquisition, if needed.

Miami Beach is internationally known as a major tourist and convention destination, as well as a successful and economically healthy island community—which is undergoing a true renaissance. This renaissance, however, has also brought congestion to our limited roadway system. The City's response to the increasing congestion problem is the provision of a reliable and attractive public transit option, the Electrowave Shuttle Service. The existing shuttle route has been operated by a fleet of seven (7) vehicles, carrying over 2.5 million passengers in two years of service. Its success is undeniable and unprecedented.

This fleet will soon grow to eleven (11) vehicles, allowing for the operation of an enhanced route that will extend service to the hotel area of Miami Beach, which has over 20,000 rooms. However, eleven (11) vehicles is the maximum number that the existing shuttle facility can accommodate and maintain. If the Electrowave Service is to expand further and accomplish its mission of reducing congestion citywide, it is essential that a permanent facility be constructed to accommodate, at a minimum, a fleet of twenty (20) vehicles.

The intermodal station component of this project will function as a transportation collector for the area, where commuters and visitors will have access to an information center, and to local and regional transit services. Pending lot size and location, the facility will also accommodate parking that will support a park-and-ride program. the park-and-ride concept was proved successful during the millennium celebrations, carrying 17,200 customers over the holiday weekend.

The City is conducting a site selection study for this shuttle facility/transit station project, which will also explore the potential for on-site economic development and joint mixed-use opportunities.

The electrowave is included in the five-year transportation improvement program of Miami-Dade County, and has the financial support of the City of Miami Beach, the Florida Department of Transportation, the FTA/Miami-Dade Transit Agency,

the Metropolitan Planning Organization, the Florida Power & Light Company, and other clean air and energy agencies.

A $10 million, fiscal year 2001 discretionary FTA fund earmark toward the shuttle facility/transit center project is critical to the long-term effectiveness of the electrowave program, and to the continued attractiveness and economic vitality of a 21st century Miami Beach.

Your consideration is sincerely appreciated.

PREPARED STATEMENT OF THE CITY OF NEWARK, NEW JERSEY

Chairman Shelby and members of the Subcommittee, thank you for giving me the opportunity to present testimony on projects within your jurisdiction which are critical to the people of Newark, New Jersey and the surrounding region. The support of this Committee has been critical in the past, and we wholeheartedly thank you for your aid to projects that have truly impacted on the people of Newark and our economy. Newark's transportation infrastructure needs are critical to enabling us to maintain our position as a regional center for commerce, government and entertainment.

Newark is truly at a crossroads: we are a City with all of the problems of many major urban centers, but we are also a City with vast potential, and there is a renewed vitality and sense of optimism in Newark. As the physical crossroads of the Northeast Corridor, the future economic viability of Newark is inextricably dependent upon the continued modernization and expansion of our intermodal transportation system. Improvements to our roadway network, our rail system, and our port and airport facilities will directly translate into jobs and economic prosperity for our City, State and Region.

The construction of major new facilities, including the three year old New Jersey Performing Arts Center, our minor league baseball stadium which opened last summer, and the Joseph G. Minish Passaic Riverfront Park and Historic Area—on which the Army Corps of Engineers has begun construction—are all related to the proximity and effectiveness of our transportation network. The repopulation of older office buildings, and construction of new ones, is occurring in large part due to the ease of access for commuters. Your help on transportation funding has improved access to not only the downtown business, arts and entertainment district, but also the rapidly growing Newark Airport/Port Newark complex. The success of University Heights, where four institutions of higher learning provide educational opportunities to over 50,000 commuter students per day, is also directly related to the ease of access to the highway system.

We are working to further capitalize on the existing transportation infrastructure by connecting current and proposed facilities with the Newark Elizabeth Rail Link. The first segment of the Newark Elizabeth Rail Link (NERL) will soon be under construction, thanks to your previous support. The first operable segment will provide the missing link between downtown Newark's two train and bus transportation nodes. It will be a 0.94 mile connection between the Broad Street Station, where trains from the western suburbs enter the City, and Newark Penn Station, on the Northeast corridor line and the central hub for New Jersey Transit trains and buses. There will be three new stations on this segment—Broad Street Station, Washington Park/Riverfront Stadium, and NJ Performing Arts Center/Center Street—which connect sites mentioned above, as well as our renowned Newark Museum and Newark Public Library, that are crucial to Newark's economic and cultural growth. The line then will enter a portal where it will connect with the existing City Subway tunnel to access Penn Station, which I will discuss further in a moment. At full build-out, the NERL is planned to be an 8.8 mile, fifteen station light rail transit line linking downtown Newark with Newark International Airport and the City of Elizabeth.

The NERL is an important and central component of our overall transportation plan. We are proud that a full funding agreement for this first operable segment of the Newark Elizabeth Rail Link has been submitted to the FTA, and the Administration has included funding for it in its budget. I respectfully ask this Committee to add its support to a $47.5 Million fiscal year 2001 allocation for this vital connection.

An additional related transportation issue is the next critical step in our revitalization of Newark's downtown. Penn Station and the presence of AMTRAK facilities is a central feature of Newark's downtown/riverfront area. This station is the last northbound stop on the Northeast Corridor before New York City, and provides rail and bus linkages to the rest of New Jersey, and the region beyond. New Jersey Transit is doing an admirable job of renovating and modernizing the facility to ac-

commodate increases in demand at the station, but the portion of the overall rail infrastructure that is owned and operated by AMTRAK is in great need of attention.

The renovation and upgrading of AMTRAK property to better serve the City of Newark, its residents and visitors is a key factor in the City's economic development and transportation initiatives. The key property is at the south side of Penn Station, and improvements to it will be a worthy investment.

The extension of the platforms at the southern end of Penn Station will enable passengers to exit the rail facility without having to navigate through passageways to exit through the station itself. This improvement will enable the connection of a pedestrian walkway to a planned economic development project, the new downtown sports and entertainment complex. With this extension, an old abandoned railroad bridge and right of way will be transformed into a productive pedestrian corridor, linking passengers to a recently planned intermodal transportation facility that will be housed adjacent to the new sports facility. The project will help to revitalize the southern portion of Broad Street—which is Newark's main commercial corridor—just as other transportation projects have facilitated the renaissance of the upper Broad Street area. The estimated cost for the platform extension is $20 million, and I ask your support for funding to plan and implement this exciting undertaking.

The assistance of this committee in funding these projects is vital. The Newark Elizabeth Rail Link and the Penn Station/AMTRAK facilities improvements are critical links in Newark's transportation network, and your support for them is crucial to our continued economic development. Your attention and consideration of the needs of Newark, New Jersey are deeply appreciated, and I thank you for your time.

PREPARED STATEMENT OF METRA

METRA OVERVIEW

Metra, the second largest commuter rail system in the U.S., provides service to north-eastern Illinois on twelve lines that serve more than 120 communities with 240 stations and a stop at O'Hare International Airport. The Metra system covers a territory the size of Connecticut with a population of 7.5 million. Each week, Metra provides nearly 4000 revenue trains and carries more than 1.5 million riders, 96 percent of whom use the system to go to and from work. On-time performance has been well above 95 percent every year of Metra's existence.

Metra has consistently been rated the best commuter rail service in the country. In 1996, Metra was the recipient of the first APTA award as the outstanding commuter rail operation. Metra has always emphasized the development of internal operations that contribute to this overall excellence. In 1995 and 1998, Metra received successive triennial reviews from FTA that had no findings or follow-ups required.

METRA'S FISCAL YEAR 2001 FUNDING REQUEST

In the fiscal year 2001 Transportation Appropriations legislation, Metra is seeking $75 million in section 5309 New Start funds to continue work on its Metra 2000 Capital program that extends and upgrades three lines on the Metra system. They are the North Central Service (Wisconsin Central), Union Pacific West Line to Elburn, and the SouthWest Service to Manhattan.

For fiscal year 2000, Metra received $25 million in New Starts funds for all three projects. These funds will be used for engineering and design, track and signal work, and land acquisition. These funds will also enable Metra to enter into Full Funding Grant Agreements (FFGA) with the FTA on all three projects this year, all of which were included in the President's fiscal year 2001 budget.

Of the $75 million in Metra's fiscal year 2001 funding request, $35 million is slated for the North Central line. The funds will be used for design, track and signal work and construction of new stations and parking. $25 million is for the Union Pacific West Line, and will also be used for design, track and signal work, and station and parking construction. $15 million of the fiscal year 2001 request will be for the Southwest Corridor for engineering and design work, track and signal work, and stations and parking.

FEDERAL/STATE COST SHARE

The total cost of the three projects is $735,348,000. The federal share of this project is $343,215,000, or 47 percent. The local share is $392,133,000, or 53 percent. This is a very favorable federal/state cost share, with the recognition by Metra to utilize as much of their own local resources as possible to build these three very vital transportation projects.

Fiscal Year 2001 Combined Capital Costs Metra Capital Improvement Program

[In thousands of dollars]

Federal New Start:	
Engineering & Design	11,393
Management & Inspection	6,433
Track & Signal	57,000
Storage Yards	5,000
Stations & Parking	13,923
Total	93,749
Federal	75,000
Local Match	18,750
Additional local commitment:	
Land	5,500
74th Street Connection (SWS)	10,000
Belt Flyover (SWS)	6,000
Track & Signal (NCS)	10,000
Stations & Parking	2,475
Total	33,975
Total Project Cost	127,724
Federal Share	75,000
Local Share	52,725
Percent Federal	59
Percent Local	41

Combined Capital Costs
Metra Capital Improvement Program
(IN $000s)

	1998	1999	2000	**2001**	2002	2003	2004	Total 1998-2004
Federal New Start								
Engineering & Design	3,750	7,499	5,057	11,393	11,084	0	0	38,784
Management & Inspection	0	0	2,660	6,433	10,358	2,581	1,935	23,987
Track & Signal	0	0	14,768	57,000	65,076	54,968	28,364	220,176
Storage Yards	0	0	8,742	5,000	7,689	2,805	0	24,237
Transfer Facility (NCS)	----	----	----	----	5,791	----	----	5,791
Stations & Parking	0	0	0	13,923	18,368	9,539	11,723	53,554
Total	3,750	7,499	31,247	93,749	118,366	69,893	42,023	366,528
Federal	3,000	6,000	24,998	**75,000**	94,693	55,915	33,618	293,222
Local Match	750	1,500	6,249	18,750	23,673	13,979	8,405	73,306
Additional local commitment (includes rolling stock, parking, stations)								
Land	0	400	5,450	5,500	0	0	0	11,350
Rolling Stock	0	0	0	0	19,400	52,200	0	71,600
74th Street Connection (SWS)	----	----	3,000	10,000	15,000	15,000	7,000	50,000
Belt Flyover (SWS)	----	----	----	6,000	10,000	40,000	44,000	100,000
Track & Signal (NCS)	2,000	2,000	15,400	10,000	10,000	0	0	39,400
Stations & Parking	0	2,350	982	2,475	8,864	12,179	2,819	29,669
Total	2,000	4,750	24,832	33,975	63,264	119,379	53,819	302,019
Total Project Cost	5,750	12,249	56,079	127,724	181,630	189,273	95,842	668,547
Federal Share	3,000	6,000	24,998	75,000	94,693	55,915	33,618	293,222
Local Share	2,750	6,250	31,082	52,725	86,937	133,358	62,223	375,325
% Federal	52%	49%	45%	**59%**	52%	30%	35%	44%
% Local	48%	51%	55%	41%	48%	70%	65%	56%

NOTES:
(a) All cost estimates in the chart are in program year dollars based on MIS cost estimate.
(b) Share of Federal FFY1998 New Start Appropriation
(c) Share of Federal FFY1999 New Start Appropriation
(d) Share of Federal FFY2000 New Start Appropriation
(e) Cost of East Wheeling Siding
(f) FFGA in 2000

NORTH CENTRAL CORRIDOR PROJECT

Since the initiation of service in this corridor in 1996, the line has experienced unprecedented levels of ridership. Between 1997 and 1998, ridership increased by almost 27 percent, the greatest increase on the Metra system. There is an acute need to double track the line and provide more frequent full day and weekend service to meet the demand. In addition, the freight traffic on the Wisconsin Central Railroad has also seen dramatic increases, exacerbating the problem for Metra. The corridor is experiencing rapid employment growth that is expected to continue over the next 20 years.

The scope of the project on the North Central line will be an upgrade of commuter service from the existing ten trains per weekday schedule with only two mid-day trains and no weekend service to twenty-two trains per weekday and provide increased train service during off-peak periods. It also is hoped that limited weekend service will be achievable as part of this alternative.

Capital improvements needed to provide the expanded service will include the following:

—Twenty-six miles of new main line track on the Wisconsin Central, Ltd. between the O'Hare Transfer Station and Mundelein;

—Twelve miles of track, signal and station upgrades on three main line tracks of the Milwaukee-West between Franklin Park and Union Station in Chicago;
—Four new stations at Franklin Park, Schiller Park, Rosemont, Grayslake, and a transfer station at Deval Junction;
—4,500 new parking spaces at proposed and existing stations;
—Expansion of the Antioch and Western Avenue rail yards; and
—One new train set (locomotive and coaches).

The fiscal year 2001 funding request for the North Central line will begin work on station construction and track and signal work. The following is a detailed funding chart that outlines the scope of the project.

Capital Costs
North Central Corridor
North Central Service Improvements (a)
(IN $000s)

	Prelim. Eng	Final Eng. & Construction						Total
	1998 (b)	1999 (c)	2000 (d)	**2001**	2002	2003	2004	**1998-2004**
Federal New Start								
Engineering & Design(e)	1,587	3,173	2,621	6,430	----	----	----	**13,811**
Management & Inspection	----	----	1,181	2,319	6,823	----	----	**10,323**
Milw West Line Track & Signal	----	----	----	6,000	5,135	----	----	**11,135**
NCS Track & Signal	----	----	14,768	21,000	30,595	25,750	----	**92,113**
Deval Transfer Facility	----	----	----	----	5,791	----	----	**5,791**
Stations & Parking	----	----	----	8,000	12,576	----	----	**20,576**
Total	1,587	3,173	18,570	43,750	60,919	25,750	0	**153,749**
Federal	1,269	2,539	14,856	**35,000**	48,735	20,600	0	**122,999**
Local Match	317	635	3,714	8,750	12,184	5,150	0	**30,750**
Additional local commitment (includes rolling stock, parking, stations)								
Land	----	400	2,950	1,500	----	----	----	**4,850**
Rolling Stock	----	----	----	----	19,400	----	----	**19,400**
NCS Track & Signal (e)	2,000	2,000	5,400	----	----	----	----	**9,400**
Stations & Parking	----	----	----	2,323	8,707	8,871	----	**19,901**
Total	2,000	2,400	8,350	3,823	28,107	8,871	0	**53,551**
Total Project Cost	3,587	5,573	26,920	47,573	89,026	34,621	0	**207,300**
Federal Share	1,269	2,539	14,856	35,000	48,735	20,600	0	**122,999**
Local Share	2,317	3,035	12,064	12,573	40,291	14,021	0	**84,301**
% Federal	35%	46%	55%	**74%**	55%	60%	0%	**59%**
% Local	65%	54%	45%	**26%**	45%	40%	0%	**41%**

NOTES:
(a) All cost estimates in the chart are in program year dollars based on MIS cost estimate.
(b) Share of Federal FFY1998 New Start Appropriation
(c) Share of Federal FFY1999 New Start Appropriation
(d) Share of Federal FFY2000 New Start Appropriation
(e) Cost of East Wheeling Siding
(f) FFGA in 2000

UNION PACIFIC WEST LINE EXTENSION

The western suburbs of the Chicagoland area have been experiencing tremendous growth over the last 20 years. They are expected to grow by nearly 60 percent by 2010. At the present time there is severe overcrowding at existing stations on the UP West line, especially in Geneva.

The Union Pacific Railroad and Metra are planning long-term signal improvements to the major access route (UP West line) to Chicago. Great benefits will accrue to Metra commuter operations, as well as to freight operations. Some of these

improvements will be included in the New Start project costs; the remainder will be paid for by the UP and Metra using their own funds.

The project will provide an extension of commuter service to Elburn on the UP West line. It entails the same level of service to Elburn as currently available in Geneva, namely thirty-seven trains per weekday and weekend service.

Capital improvements needed to extend service to Elburn will include the following:

—Seven miles of a new third main line track on the Union Pacific West line between Randall Road and Elburn;
—Upgrades of train control systems and at-grade crossings along the seven miles of track;
—Two new stations at Elburn and LaFox;
—1,600 new parking spaces at the proposed stations;
—New train storage yards in Elburn; and
—One new train set (locomotive and coaches).

The fiscal year 2001 funding request for the UP West extension will be used for track and signal work, storage yards, and land acquisition. The following is a detailed funding chart that outlines the scope of the project.

Capital Costs
Central Kane County Corridor
Union Pacific West Line Extension (a)
(IN $000s)

	Prelim. Eng. ←			Final Eng. & Construction →				
	1998 (b)	1999 (c)	2000 (d)	**2001**	2002	2003	2004	**Total 1998-2004**
Federal New Start								
Engineering & Design (f)	778	4,326	240	2,865	----	----	----	**8,209**
Management & Inspection	----	----	1,499	1,211	695	757	443	**4,605**
Track & Signal	----	----	----	20,000	5,291	4,879	4,036	**34,205**
Storage Yards	----	----	8,742	5,000	2,834	2,805	0	**19,382**
Stations & Parking	----	----	----	2,174	----	923	2,377	**5,475**
Total	778	4,326	10,481	31,250	8,820	9,364	6,857	**71,875**
Federal	622	3,461	8,385	**25,000**	7,056	7,491	5,485	**57,500**
Local Match	156	865	2,096	6,250	1,764	1,873	1,371	**14,375**
Additional local commitment (includes rolling stock, parking, stations)								
Land	----	----	2,500	3,000	----	----	----	**5,500**
Rolling Stock	----	----	----	----	----	19,400	----	**19,400**
Track & Signal (e)	----	----	10,000	10,000	10,000	----	----	**30,000**
Stations & Parking	----	----	982	152	157	1,650	1,658	**4,599**
Total	0	0	13,482	13,152	10,157	21,050	1,658	**59,499**
Total Project Cost	778	4,326	23,963	44,402	18,977	30,414	8,514	**131,374**
Federal Share	622	3,461	8,385	25,000	7,056	7,491	5,485	**57,500**
Local Share	156	865	15,579	19,402	11,921	22,923	3,029	**73,874**
% Federal	80%	80%	35%	**56%**	37%	25%	64%	**44%**
% Local	20%	20%	65%	44%	63%	75%	36%	**56%**

NOTES:
(a) All cost estimates in the chart are in program year dollars based on MIS cost estimate.
(b) Share of Federal FFY1998 New Start Appropriation
(c) Share of Federal FFY1999 New Start Appropriation
(d) Share of Federal FFY2000 New Start Appropriation
(e) Signal installation East of Geneva to permit efficient commuter service
(f) FFGA in 2000

SOUTHWEST SERVICE EXTENSION AND UPGRADE

The SouthWest Service project will bring the line up to a full service route, providing double-tracking of the line and an eleven mile extension to Manhattan, serving Will County. This corridor, perhaps more than any other Metra service, has a continuing problem with freight interference. Metra has already undertaken a study of possible actions that might be taken to ease some of this interference. Metra has utilized $12.6 million of CMAQ formula funds and local monies for improvements to some of the bottlenecks with freight traffic. In 1999 Metra included $20 million of its own funds for implementation of recommended improvements that arose from the study.

The project provides for an upgrade to the existing service and extension of limited service to Manhattan in Will County. The upgrade of service on the SouthWest Service will provide approximately thirty trains per weekday to Orland Park. This will improve the frequency of trains during peak periods of travel and provide bi-hourly train service during off-peak periods. Four trains per weekday will be provided on the extension to Manhattan. Weekend train service to Orland Park will also be provided as part of the service upgrade.

Capital Improvements needed to implement service expansions on the SWS will include the following:

—Four miles of a new second main line track on the Norfolk Southern between Palos Park and 143rd Street in Orland Park;
—Rehabilitation of bridges between 40th and 74th Streets;
—Upgrades of track, train control systems, and at-grade crossings over 32 miles of right-of-way between 74th Street in Chicago and Manhattan;
—Two new stations and parking in the Manhattan area;
—Improvements to existing stations and added parking capacity;
—New train storage yard in Manhattan and expansion of existing yard at 47th Street;
—Relocation of the Chicago terminal to LaSalle Street Station;
—Additional locomotives and coaches; and
—Commuter and freight train interface improvements.

The fiscal year 2001 funding request for the SouthWest Service extension will be used for engineering and design, track and signal work, and land acquisition. The following is a detailed funding chart that outlines the scope of the project.

Capital Costs
Southwest Corridor
SouthWest Service Improvements & Extension (a)
(IN $000s)

	Prelim. Eng.	←		Final Eng. & Construction			→	
	1998 (b)	1999	2000 (c)	**2001**	2002	2003	2004	Total 1998-2004
Federal New Start								
Engineering & Design (g)	1,386	----	2,196	2,098	11,084	----	----	**16,764**
Management & Inspection	----	----	----	2,903	2,640	1,825	1,492	**9,059**
Track & Signal	----	----	----	10,000	24,055	24,339	24,329	**82,723**
Storage Yards	----	----	----	----	4,855	----	----	**4,855**
Stations & Parking	----	----	----	3,749	5,792	8,616	9,346	**27,503**
Total	1,386	0	2,196	18,750	48,627	34,780	35,166	**140,904**
Federal	1,109	0	1,757	**15,000**	38,901	27,824	28,133	**111,615**
Local Match	277	0	439	3,750	9,725	6,956	7,033	**27,904**
Additional local commitment (includes rolling stock, parking, stations)								
Land	----	----	----	1,000	----	----	----	**1,000**
Rolling Stock	----	----	----	----	----	32,800	----	**32,800**
74th St. Connection (d)	----	----	3,000	10,000	15,000	15,000	7,000	**50,000**
Belt Flyover(e)	----	----	----	6,000	10,000	40,000	44,000	**100,000**
Stations & Parking(f)	----	2,350	----	----	----	1,659	1,161	**5,170**
Total	0	2,350	3,000	17,000	25,000	89,459	52,161	**188,970**
Total Project Cost	1,386	2,350	5,196	35,750	73,627	124,238	87,327	**329,874**
Federal Share	1,109	0	1,757	15,000	38,901	27,824	28,133	**111,615**
Local Share	277	2,350	3,439	20,750	34,725	96,414	59,194	**216,873**
% Federal	80%	0%	34%	**42%**	53%	22%	32%	**34%**
% Local	20%	100%	66%	58%	47%	78%	68%	**66%**

NOTES:
(a) All cost estimates in the chart are in program year dollars based on MIS cost estimate in 2001 dollars.
(b) Share of Federal FFY1998 New Start Appropriation
(c) Share of Federal FFY2000 New Start Appropriation
(d) Assuming St. Charles Airline is abandoned, connection required to access LaSalle St.
(e) Separation from freight traffic to achieve reliable performance
(f) 1999 includes cost of Palos Heights Station
(g) FFGA in 2000

PREPARED STATEMENT OF BI-STATE DEVELOPMENT AGENCY

Mr. Chairman I am pleased to report to you that your past support for the Missouri/Illinois MetroLink Light Rail system continues to be strongly vindicated. In 1992 the Bi-State Development Agency provided 40 million rides to the public. In 1999 the combined bus and rail system provided over 53.6 million rides demonstrating that the bus system benefits greatly from MetroLink and that the combined bi-state system continues to attract a new discretionary market becoming more and more willing to use public transit. As you may recall, our original line was projected to attract 17,000 riders. The first year the system opened we far exceeded that number and today are attracting in excess of 44,000 riders a day that continues to grow.

Since your committee has emphasized the importance of inter-modal connections we are also pleased to report that the two St. Louis Lambert International Airport Metro Link Stations were expected to generate about 800 riders a day and are instead generating over 3,200 a day and has proven to be a major tool being used by the St. Louis tourism and business community.

This overwhelming acceptance and demand for additional service brings us to our fiscal year 2001 appropriations request of $60 million to continue the vital expansion of Metro Link into St. Clair County Illinois. This amount tracks the amount designated for the extension in our Full Funding Agreement with FTA. An early look at the popularity of this extension is evidenced by the fact that on the existing system, the most east-ward stop in East St. Louis, Illinois has generated so many riders trying to escape the bridge congestion into Missouri that the parking lot originally designed for 150 cars has been expanded to over 1,000 cars. Over 30 percent of the downtown St. Louis workers reside in Illinois.

Finally, Mr. Chairman, MetroLink has increased bus ridership by 6 percent with the average age of our bus fleet exceeding nine years resulting in a tremendous need for assistance in modernizing our fleet. Therefore we are seeking a bus discretionary earmark of $15 million to continue our important modernization program.

We thank you Mr. Chairman and all of the Members of the Committee for your past support as we strive to continue expanding this highly successful new rail start program.

PREPARED STATEMENT OF METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS

INTRODUCTION

My name is Robert Miller. I am Chairman of the Board of Directors of the Metropolitan Transit Authority of Harris County, Texas, more commonly known as Houston METRO. I am pleased to report on the progress METRO has made in the past year to expand and enhance its public transportation services. METRO's fiscal year 2001 appropriations request builds on our past success while moving forward with aggressive plans to enhance the service we provide to our customers.

1999 marked METRO's twentieth year as the Houston region's public transit agency. We are proud of the service we provide in the city of Houston and Harris County with our extensive network of buses, HOV lanes, transit centers, and park & ride facilities. Because METRO reduces highway congestion by 200,000 cars per day, everyone in the Houston region benefits from METRO regardless of whether they use the system.

While METRO is proud of its current bus system, we have a real and immediate need to enhance our high capacity transit infrastructure in certain corridors. It is projected that our region will grow in population from 4.4 million in 1998 to 6.6 million in 2025, with employment increasing from 1.5 million to 2.5 million. These dramatic increases will put pressure on the public transit system that METRO must anticipate and address. METRO's ridership has grown twelve percent in the past two years alone. We believe our proposed capital projects and service enhancements will draw additional riders to our system.

METRO, in partnership with the City of Houston, Harris County and the Texas Department of Transportation (TxDOT) also operates a high-tech transportation and emergency management center called Houston TranStar. This consortium was formed to prevent the duplication of traffic congestion efforts and coordinate the resources of the participating agencies.

Houston TranStar is a control center that monitors and tracks traffic using Intelligent Transportation System (ITS) devices. Some of these include: a Computerized Freeway Transportation Management System, a Regional Computerized Traffic Signal System, a Motorist Assistance Program, and the HOV lane network and modernizing projects.

One program that is part of Houston TranStar that helps elevate truck accidents is the Truck Safety system. This system identifies unsafe speed conditions for various vehicle sizes and weights, and initiates warning devices to prevent out-of-control accidents by these vehicles.

METRO recognizes the importance of a strong transportation network to the economic vitality of the Houston region. As we begin the 21st century, METRO will complete construction of the various projects comprising the Regional Bus Plan ("RBP") and move forward with the follow-on project—known as the Advanced Transit Program or the "ATP."

In 1999, METRO completed its Major Investment Study (MIS) for enhancing mobility in the Downtown to Astrodome Corridor. The MIS concluded that light rail in the corridor was the locally preferred Houston alternative, and the METRO Board of Directors unanimously adopted these findings. I can report to you firsthand that local enthusiasm for the rail project is overwhelming. METRO looks forward to working with Congress and the Federal Transit Administration (FTA) to

build a rail line that will carry thousands of passengers to and from major business centers, medical facilities, universities, and cultural attractions. We believe the rail line will have an added benefit—it will reduce congestion in a city where pollution is a real issue. The seventeen planned stations along the corridor will serve major destinations, including downtown, midtown, University of Houston Downtown, the Texas Medical Center, Rice University, Hermann Park, the Museum district, and the Astrodome. We expect the rail project to trigger economic development along the corridor and, accordingly, local businesses led by the Main Street Coalition, have voiced strong support for this project. Residential and commercial developers see the potential for light rail to spur housing and commercial development. Over 60 local organizations have endorsed METRO's Millennium Mobility Plan and voiced support for the light rail transit project.

Without Congress, METRO could not have made such significant progress on the rail project or many of its transit improvements. Congress voiced its support for the RBP by providing the full funding specified under the full funding grant agreement. Congress has also provided ATP funding which METRO has used for the LRT the MIS and preliminary engineering.

METRO seeks to build the rail project with funds already appropriated under the RBP. In that regard, last fall the Federal Transit Administration entered into a Memorandum of Understanding (MOU) with METRO agreeing to amend the full funding grant agreement to include rail, when the project meets all of the statutory and regulatory requirements and after giving Congress the notice required under the law. We are confident that the Members of this Committee will recognize the tremendous benefits of the light rail project and support the full funding grant agreement amendment.

Last year, I used the opportunity of submitting testimony to introduce our new President, Shirley A. DeLibero. As you can see from our progress this past year, Shirley's leadership, management skills, and enthusiasm have benefited both METRO and our customers. We are lucky to have Shirley to lead METRO in building our first rail line and continuing to build infrastructure to support our extensive high capacity bus system.

FISCAL YEAR 2001 FEDERAL LEGISLATIVE PRIORITIES

Regional Bus Plan—$10.86 million.—In fiscal year 2001, METRO seeks final payment under the RBP full funding grant agreement. METRO appreciates the overwhelming congressional support for this project, comprised of high capacity transit projects including an HOV lane, park & ride facilities, transit centers, buses for service expansion, and related infrastructure. The METRO Board of Directors initially adopted the RBP in 1992 as the comprehensive public transportation program for the region. We continue to work toward the objective of implementing approximately 40 individual projects whose independent utility provide incremental improvements in facilities and services as projects are completed. These projects include park and ride facilities, ramps and other street improvements, and transit stations connecting the light rail line to the network of bus routes.

As I discussed earlier, we look forward to working with Congress and the Federal Transit Administration to incorporate construction of the Downtown to Astrodome light rail project within the Regional Bus Plan. This change to the full funding grant agreement is easily accomplished, will have no effect on the cost of either the RBP or ATP projects, and will not result in delays to any of the planned projects. In fact, the idea for the change arose when the local community decided it preferred a tollroad in Houston's Westpark Corridor instead of an HOV lane as included in the full funding grant agreement. Because METRO cannot build a tollroad with FTA funds, it sold a portion of the Westpark Corridor to the Harris County Tollroad Authority. This change freed up the bulk of the federal money needed to construct the rail project under the existing RBP full funding grant agreement. A tremendous benefit of this project substitution is that the funds are already appropriated.

The federal share of the RBP full funding grant agreement is $500 million. With a final payment of $10.86 million, the federal government will satisfy its commitment to the project.

We at METRO are excited about the many benefits of the RBP, which is an example of how different projects work in different corridors. We have always involved the community in the planning process, this has resulted not only in an extensive and well-utilized HOV system, but in a light rail project, which has independent utility because of the many destinations it will serve and the potential home-to-work utilization. METRO remains committed to working with Congress and the local community to determine the most effective and efficient transit options to meet the region's growing needs.

Advanced Transit Program—$28.1 million.—With RBP funding almost complete, METRO is excited to move forward with the ATP. The ATP builds on the successes of the RBP. Like the RBP, it is a program of individual projects which will each have independent utility. Because the ATP is a series of projects it will benefit many segments of our service area. Projects include transit centers and other improvements. While the Westchase Park & Ride facility construction and the clean fuel engine project were originally in the RBP, METRO now plans to construct them under the ATP without any compromise in schedule.

Congress has recognized the importance of the ATP to the Houston region and appropriated almost $6 million in New Start funds for the project in fiscal years 1998 through 2000. METRO has used this funding for the Major Investment Study and to initiate PE on the light rail project, and to initiate the clean fuel engine project. For fiscal year 2001 METRO is requesting $5 million in New Start funding to allow us to advance desperately needed transit improvements on the Katy Freeway and the West Loop. The improvements will insure that METRO can provide transit access which will complement TxDOT planned freeway improvements in this corridor.

In addition, METRO is requesting $23.1 million in Section 5309 Bus funds for design and construction of several key ATP projects that are scheduled for implementation in fiscal year 2001–2003. These projects include the Gulfgate Transit Center, Hobby Transit Center, Westchase Park & Ride, and the Clean Fuels Engine Program.

CONCLUSION

1999 has been an exciting year for Houston METRO and we look forward to building on our success as we embark on the new millennium. We operate a public transit system used by over 117 million people per year, and are constantly adapting our plans to best meet the future mobility needs of the people of Harris and surrounding counties. The federal investment in transit in Houston continues to benefit the millions of users who reach their destinations efficiently and the rest of the community by spawning economic growth in the downtown area and reducing congestion and pollution. As a business, METRO remains on sound financial footing with no debt and is committed to seeking innovative ways to operate more efficiently and contribute to the growth of the economy.

Thank you for the opportunity to offer these remarks. METRO is prepared and looks forward to responding to any questions the Committee may have.

PREPARED STATEMENT OF THE TRI-COUNTY COMMUTER RAIL AUTHORITY

Mr. Chairman, on behalf of the thousands of daily commuters who use the Tri-County Commuter Rail Authority (Tri-Rail) in the South Florida region, I (Linda Bohlinger) would like to express my sincere appreciation of your support in funding the South Florida Rail Corridor Improvement Program in the past years.

We are now requesting that the Subcommittee on Transportation and Related Agencies Appropriations provide $30.0 million in New Starts funds for Segment 5 of our Double Track Corridor Improvement Program as part of the fiscal year 2001 appropriations bill for the Department of Transportation. This request is consistent with our Full Funding Grant Agreement (FFGA) financial plan for the Segment 5 Project. Tri-Rail's FFGA request is currently under review by your committee and other committees of jurisdiction. We are hopeful the committee will recommend FTA approve our request shortly. In addition, we are requesting $2.5 million in Bus Program funds (Section 5309) be allocated to Tri-Rail.

ABOUT TRI-RAIL

Mr. Chairman, the development of Tri-Rail must be understood within the context of the demographic changes occurring throughout South Florida since the 1970's. The South Florida region consists of the counties of Palm Beach, Broward, and Miami-Dade. As a region, South Florida's population has more than doubled since 1970 to more than 4.7 million people, and is expected to grow at a rate of 2 percent annually.

As residential development out paced the provision of infrastructure improvements, public attention increasingly shifted to issues relating to regional mass transit and growth management. In response, the Florida Department of Transportation and the three Metropolitan Planning Organizations in the region formed the Tri-County Transportation Subcommittee in 1985. The subcommittee recommended that a commuter rail line be established and drafted a detailed action plan to implement

the recommendations. In 1986, Tri-County Commuter Rail Organization was formed to begin the task of building a new commuter rail system. The Tri-County Commuter Rail Organization was the predecessor agency of the present Tri-Rail.

In 1988, the State of Florida purchased an 81-mile corridor, later to be known as the South Florida Rail Corridor, from CSXT freight railroad for $264 million. The corridor runs from West Palm Beach to Miami. In a flurry of activity during 1988, rail vehicles and temporary funding was quickly assembled, and the Governor signed a bill creating Tri-Rail. On January 6, 1989, commuter rail service between West Palm Beach and Miami was initiated. This was the first commuter rail start-up in North America in over 20 years.

Today, Tri-Rail operates commuter rail service along 71.7-miles of the South Florida Rail Corridor. The Tri-Rail system is currently comprised of 18 stations, five in Miami-Dade County, seven in Broward County, and six in Palm Bach County. Services to these stations are provided by 28 weekday trains, 14 Saturday trains, and 12 Sunday trains. Additional trains are occasionally furnished for special events.

DOUBLE TRACK CORRIDOR IMPROVEMENT PROGRAM

During the first five years of Tri-Rail operations, ridership increased at a steady rate. During the initial year of operations, ridership averaged approximately 3,000 riders each weekday. In 1991, system ridership increased to approximately 7,200 weekday riders and by 1993, average weekday ridership had grown to approximately 9,500.

In 1995, Tri-Rail ridership started to decline. This decline was attributed to the over-capacity of the single mainline track in the corridor resulting in poor on-time performance. Along with Tri-Rail, the corridor is shared with CSXT freight service and Amtrak long-haul passenger service. Under this type of operating condition, Tri-Rail's ability to schedule commuter service is extremely difficult. Tri-Rail can only operate service on one-hour headways during peak periods.

Mr. Chairman, thanks to Congress' investment in the federal transit program, Tri-Rail in 1995 initiated the first of five segments of its Double Track Corridor Improvement Program to address the corridor capacity issues. We are pleased to report, Segments 1 and 2 have been completed, Segment 3 is near completion and Segment 4 is in the final design phase. Today, we are asking the Subcommittee on Transportation to provide $30.0 million in New Starts funds for the final segment of the double track program—Segment 5.

Once completed, the Double Track Corridor Improvement Program will reduce congestion on I–95, shorten average trip time lengths and provide travel alternatives in the largest travel market in South Florida. Upon completion of the program in March 2005, Tri-Rail will operate 20-minute headways. It is projected Tri-Rail ridership will jump to 43,132 annual new riders in 2015. Finally, the program will result in travel timesavings of 11.2 million annually and a 4.1 million reduction in daily vehicle trips. This program will directly benefit those businesses that rely on Tri-Rail to provide access to customers. It will also benefit the thousands of daily commuters in South Florida.

Segment 5 Project

Tri-Rail is undertaking a major capital improvement program to double track all 71.7-rail miles, with the objective of increasing speed, reliability, and safety along the corridor, and is expected to significantly increase current ridership. The scope of work covered by the Full Funding Grant Agreement consists of 44.31 miles of double track work (Segment 5). It includes the laying of a second mainline track, rehabilitation of the signal system, grade crossing improvements, station improvements, parking expansions, and rolling stock acquisition. The other portion of the overall double track program (approximately 27.39 miles) was divided into four segments, and is either completed, under construction, or under design.

SEGMENT 5 FINANCIAL PLAN

Tri-Rail intends to complete the construction of the $327.0 million Project through the execution of a Full Funding Grant Agreement with the Federal Transit Administration (FTA), under which FTA will provide $110.5 million in New Starts funds over the period fiscal year 2000–03. The balance of the funds are derived from the State of Florida ($70.0 million in gas tax funds and $35.0 million in federal highway funds); the Miami-Dade, Broward and Palm Beach Metropolitan Planning Organizations ($22.2 million); Tri-Rail ($34.2 million in federal formula funds); and a private sector loan or revenue bond issuance ($55.1 million).

Mr. Chairman, this project is a very attractive and cost-effective new starts project, in that the total New Starts funds sought are 33 percent of the funding

being provided from non-discretionary resources (formula, flexible, and State funds); this is very high.

The Segment 5 Financial Plan calls for $30.0 million in New Starts funds for fiscal year 2001. Allocation of the full amount will ensure the project's construction schedule can be maintained and our contractual obligations under the FFGA can be met.

RELIABILITY OF PROJECT COST ESTIMATE

The phased approach used by Tri-Rail in the construction of the double track program provides a level of reliability in the Segment 5 Project cost estimate that is unusual in new starts projects. The initial four segments of the Double Track Corridor Improvement Program each involve the design and construction of track, signals, and stations. As a result, the same basic scope of work has been repeated, from segment to segment, in what could be viewed as a series of smaller projects. Segments 1 and 2 have been completed, Segment 3 is near completion and Segment 4 is in the final design phase. With Tri-Rail's past experience with Segments 1 through 4, Tri-Rail knows the actual cost per mile of the track work and the actual cost of specific station improvements.

Tri-Rail has the benefit of having actually incurred construction costs in the same alignment and under the same conditions, which allow Tri-Rail to base its cost estimates for the FFGA Project. This cost experience was supplemented by the analysis done during preliminary engineering for the FFGA Project and has provided Tri-Rail with highly reliable cost estimates.

FEEDER BUS PROGRAM

Mr. Chairman, Tri-Rail is requesting $2.5 million in Bus Program funds (Section 5309). The funds will be used to acquire buses to support Tri-Rail's Feeder Bus Program. Tri-Rail's feeder bus service was initiated in conjunction with the commuter rail service in January 1989.

The current bus network serving Tri-Rail is a combination of service provided by the three local county bus operators in the South Florida region. In addition, Tri-Rail operates six of its own shuttle routes at various stations. With the requested funds, Tri-Rail will be able to place an additional 20 buses into service. Such service is needed to fully support the commuter rail system and ensure maximum ridership.

The feeder and distribution bus network plays an essential role in complementing and supporting Tri-Rail's service. In many cases, Tri-Rail riders are dependent on bus service to connect to their employment and/or residential destinations. Therefore, in order for Tri-Rail to improve its ridership, increased rail frequency (20 minute headways) will be largely insignificant without corresponding improvements in bus service. These improvements will include matching service frequency while ensuring reasonable wait times between bus and rail connections. Another key element is the balance between adequate area coverage and cost effectiveness.

CONCLUSION

In closing, Mr. Chairman we again thank you for this opportunity to discuss before your Subcommittee the critical role Tri-Rail can and does play in providing transportation service to millions in South Florida. We urge your committee and other committees of jurisdiction recommend to the FTA to approve and to execute our FFGA. This will facilitate completing the double track program by March 2005. Once completed, the South Florida Rail Corridor will increase accessibility and mobility options to all persons, as well as improve freight operations in South Florida.

We are also requesting that the Subcommittee on Transportation and Related Agencies Appropriations provide $30.0 million in New Starts funds for Segment 5 of our program as part of the fiscal year 2001 appropriations bill for the Department of Transportation. In addition, we are requesting $2.5 million in Bus Program funds (Section 5309) be allocated to Tri-Rail.

Once again, thank you for this opportunity to testify before the Subcommittee on Transportation and Related Agencies Appropriations. We would be pleased to provide you additional information to assist you in your deliberations.

PREPARED STATEMENT OF THE AMERICAN PUBLIC TRANSPORTATION ASSOCIATION

INTRODUCTION

The American Public Transportation Association (APTA) appreciates the opportunity to testify on the fiscal year 2001 Department of Transportation and Related Agencies Appropriations bill.

APTA's 1,270 member organizations serve the public interest by providing safe, efficient and economical public transportation service, and by working to ensure that those services and products support national energy, environmental, community, and economic goals. APTA member organizations include transit systems; design, construction and finance firms; product and service providers; academic institutions, and state associations and departments of transportation. More than ninety percent of the people who use transit in the U.S. are served by APTA member systems. On the first day of this year, APTA adopted a new name to reflect the broader role that APTA member organizations play in addressing the transportation needs of our nation—The American Public Transportation Association. Our members chose "public transportation" in lieu of "public transit" to better convey the full range of transportation services that APTA members are engaged in—planning how to meet local transportation needs, managing mobility demands, and delivering a range of services in a number of ways, including commuter rail, paratransit, and ferry boats, that are often not considered "transit."

Transit and TEA 21

Over its first three years, the Transportation Equity Act for the 21st Century (TEA 21) has, with its policy changes and guaranteed funding, been critical in assisting the public transportation industry address mobility issues around the country. We sincerely appreciate what the legislation, and its annual funding through the appropriations process, has meant for our industry. But large unmet needs still exist in the United States' public transportation sector. The U.S. Department of Transportation finds that $14 billion needs to be invested each year just to maintain and improve transit conditions and performance.[1] With the most recent report from the Congressional Budget Office projecting as much as $1.92 trillion in potential surpluses over the next decade, we believe that there is no better time than the present to invest in the future of our nation's transportation infrastructure. Therefore, APTA urges the Subcommittee in its fiscal year 2001 Transportation Appropriations Act to fund the federal transit program at the $7.3 billion level authorized in TEA 21. On a related issue, APTA strongly opposes any efforts to repeal federal motor fuel taxes dedicated to supporting federal investment in our surface transportation infrastructure. In that regard, on March 12, 2000, APTA's Board of Directors unanimously adopted a resolution opposing any revision to the existing federal motor fuels tax.

ADMINISTRATION'S BUDGET PROPOSAL

Mr. Chairman, we are pleased that the Administration's fiscal year 2001 Budget proposes to increase funding for transit by more than 9 percent. This proposal keeps us on track to improve mobility for millions of Americans while easing traffic congestion and improving the quality of life in communities throughout the U.S. Moreover, APTA agrees with the Federal Transit Administration's (FTA) assessment that the vitally important Job Access and Reverse Commute Program should be funded at the fully authorized level of $150 million as provided in TEA 21. However, we believe that this program should be fully funded by using discretionary spending authority rather than by reopening TEA 21.

Some 94 percent of welfare recipients attempting to move into the workforce do not own cars and must rely on public transportation to get to work. And while 60 percent of welfare recipients live in central cities, the majority of new jobs are in the suburbs. If we as a nation wish to continue the positive trends in getting more people into decent, productive employment, we must provide the necessary funding to get them there. Not only do these programs get people to jobs, but they also provide America's employers with access to the services of thousands of new employees. This program is a non-traditional one that needs to be implemented creatively. We commend FTA on its outreach efforts to date, and urge it to continue its efforts to streamline the program administratively and to focus on increased program coordination at the federal, state, and local levels.

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[1] 1997 Status of the Nation's Surface Transportation System: Condition and Performance; U.S. DOT.

While certain transit welfare-to-work activities have been enormously successful, more needs to be done. In October 1998, the APTA Access to Jobs Task Force was created in an effort to coordinate and assess APTA member welfare-to-work activities. Frequently described new services include new routes to employment locations outside the existing service area; more direct service to reduce very long trip times; late night and early morning service; so-called reverse commute service; and shuttles from rail stations and the ends of bus routes to dispersed job locations. Regardless of the type of service made available, APTA's 1999 Access-To-Work Best Practices Survey Summary Report reveals that a number of welfare-to-work projects have been hampered by funding deficiencies. That is why we believe increased funding is warranted for this program.

In fact, Mr. Chairman, we strongly urge the Subcommittee to appropriate the TEA 21 fully authorized level for all parts of the federal transit program. Again, Mr. Chairman, transportation experts agree that it would take $14 billion each year—nearly twice the amount authorized under TEA 21 for the coming fiscal year—to effectively preserve and expand our public transportation infrastructure. Therefore, if Congress adjusts the spending caps put in place as a result of the 1997 Balanced Budget Agreement, APTA strongly urges the Subcommittee to use this additional spending authority to fund the federal transit program at the $7.3 billion level authorized in TEA 21. With an fiscal year 2001 Non-Social Security surplus projected to reach as high as $69 billion, we can think of no better time to maximize investment in our public transportation infrastructure.

PUBLIC TRANSPORTATION RIDERSHIP AT RECORD LEVELS

Mr. Chairman, the latest numbers are in, and they indicate that more and more people are choosing to use public transportation. Thanks to Congress' investment in the federal transit program, improvements in the transit commuter benefit tax law, and a healthy economy, approximately 9 billion transit trips were recorded in 1999. Over the last four years, transit ridership in the United States has grown by 16 percent, an average of 4 percent per year.

U.S. transit ridership was up 4.9 percent through the first nine months of 1999.[2] Ridership is on the rise in every mode, led by more than a 7.3 percent increase in trolleybus passengers and a 6.6 percent increase in heavy rail passengers. In the bus category, ridership continues to grow in areas across America. For example, the following areas experienced significant bus ridership increases: New York City, 10 percent; Buffalo, 13 percent; Cincinnati, 7 percent; Minneapolis, 10 percent and Canton, Ohio, 41 percent.

Public Transportation Growing in Rural America and Small Cities

Moreover, Mr. Chairman, public transportation ridership is not just growing in large cities and suburbs. Through the first nine months of the year, bus ridership increased by the greatest percentage in areas with less than 50,000 people.

Thanks to this Subcommittee, the Intermodal Surface Transportation Efficiency Act, and TEA 21, transit funding for rural communities and smaller cities has increased significantly. For example, in fiscal year 1993, the Rural Capital and Operating Program was funded at $91 million. In contrast, during the most recent fiscal year, the transit Rural Formula Program received more than twice that amount, nearly $194 million. Moreover, the fiscal year 2000 appropriation for rural areas is 195 percent higher than it was only a decade ago.

Small urbanized areas have also seen dramatic increases in federal transit funding over the last decade. In 1990, small urbanized areas received approximately $150 million in federal transit funding. In contrast, nearly $268.5 million was appropriated to these cities during the current fiscal year. That's an increase of 79 percent over the ten-year period. Thanks to this dramatic investment in public transportation infrastructure in smaller cities, transit is now also seen as a crucial mobility solution in areas outside America's traditionally transit dependent regions.

As a result of this increased investment, bus systems across small-town America were able to implement major expansions in service during the last year. For example, Knoxville Area Transit has introduced new antique-style trolley-replica buses, one of which connects the University of Tennessee with downtown Knoxville. The agency has also increased frequency of service and extended hours of operation. Trolley operators have been trained as city ambassadors who can inform visitors of attractions throughout the downtown Knoxville area. In State College, Pennsylvania, the Centre Area Transportation Authority recently began operating free

[2] APTA Transit Ridership Report, Third Quarter 1999.

LOOP service on two routes serving the Pennsylvania State University and downtown State College.

PUBLIC TRANSPORTATION DELIVERS

Public Transportation Has Significant, Positive Impacts On the U.S. Economy

Beyond the increases in transit use, public transportation generates a real return on the federal investment. In addition to the 300,000 people employed directly by the $27 billion-a-year public transportation industry, thousands of other people employed in the engineering, construction, manufacturing and retail industries rely upon transit investment for their livelihood. A recent study prepared by Cambridge Systematics, Inc. finds that transit capital investment is a significant source of job creation. Every $10 million of transit capital investment creates approximately 314 jobs and a $30 million gain in sales for businesses. Furthermore, the changes in travel patterns caused by transit investment remove vehicles from the traffic stream, saving time for both transit and highway users. The increased productivity caused by this significant timesaving serves to stimulate the economy.

Public Transportation and Traffic Congestion

Mr. Chairman, there is no disputing the fact that traffic congestion in the U.S. has reached epidemic proportions. However, as bad as it is, imagine what it would be like without public transportation! Regions like Washington, D.C. and Los Angeles would require nearly 300,000 more cars on the road without transit. Chicago would need approximately half a million more cars. But who would have thought 20 years ago that places like Memphis, Tennessee would require between 10,000 and 30,000 extra vehicles if there were no transit?[3]

INCREASED PUBLIC TRANSIT INFRASTRUCTURE INVESTMENT IS NEEDED

As noted, Mr. Chairman, transit ridership is up and public transportation delivers significant benefits. Even though highway and transit spending has increased under TEA 21, transportation experts agree that our capital investments still fail to keep pace with the annual $14 billion needed for public transportation infrastructure in the U.S. An unprecedented level of travel is taking place, and will continue to take place, throughout this country. If current trends continue, over the next 15 years alone, highway travel is expected to increase by 40 percent, and transit use by 60 percent. In order to accommodate such growth, it is critical to provide maximum investment in all forms of surface transportation, including public transportation.

More Investment Needed to Provide Mobility Choices

Mr. Chairman, traffic congestion has become a major political issue. The average person need not be reminded of the size of the problem; they are surrounded by it weekdays, weekends, no matter what the time of day. Here in Washington, there have been countless briefings, seminars, conferences and round table discussions focusing on the issue of congestion, and possible solutions to enhancing our mobility.

A new study released by the Texas Transportation Institute (TTI) confirms our observations: traffic is bad, and it's getting much worse every year. The study notes that in 1997, congestion cost travelers in 68 urban areas 4.3 billion hours of delay. The financial cost of congestion now exceeds $72 billion annually, an increase of more than $6 billion from the previous year. That's the equivalent of $755 per eligible driver, or $3 every workday. Cities on top of the list include Los Angeles, Seattle, San Francisco and Chicago. The Washington, D.C. region finished 2nd among very large cities.

Mr. Chairman, it's no wonder that so many American cities are seriously debating the merits of asking local voters to start or expand light rail, commuter rail, or bus service in their communities, including Austin, Texas; San Antonio, Texas; Salt Lake City, Utah; Tampa, Florida; Milwaukee, Wisconsin; Dallas, Texas; and Cincinnati, Ohio.

The need for more public transportation infrastructure is becoming apparent to Americans in all corners of the nation. Last November, by more than 60 percent of the vote, Denver area residents overwhelmingly voted to endorse a light-rail project that will dramatically expand the city's public transportation system along heavily congested I–25. Last month, by a margin of almost two to one, voters in Phoenix, Arizona approved the region's first light-rail system, as well as an expansion of bus service. In addition, 60 percent of the electorate in Sonoma County, California recently voted to increase the county's sales tax to fund local transit improvements.

[3] Dollars & Sense: The Economic Case for Public Transportation in America. Donald Camph, 1997, p. 77.

While the TTI study advances a number of possible solutions to America's traffic congestion crisis, one of the obvious proposals to increase mobility is very clear: offer citizens mobility choices. We believe that public transportation can and will play an enormous role in doing just that. In this regard, consider the New York City area. APTA believes that it is no coincidence that the transit oriented New York City-Northeastern New Jersey region, one of the most densely populated areas in the entire world, ranks low on the TTI study's list for annual congestion cost per eligible driver (number 27). If there was no transit in that region, up to two million additional personal vehicles would have to be added to the already crowded roads in that area.[4]

Increased Funds are Required to Maintain ADA Compliance Standards

Since the enactment of the Americans with Disabilities Act, transit agencies have made significant progress in the effort to ensure that all forms of public transportation are accessible to individuals with disabilities. According to an APTA survey of 300 transit agencies, there were approximately 25,000 U.S. transit buses in 1993 that were not wheelchair accessible. In 1998, that number was less than 14,000. Similarly, commuter rail operators reduced the number of non-accessible rail cars by more than half over the same period. However, as the population ages, the need for demand response and paratransit service will continue to rise. Public investment for these services and further on-vehicle lift, ramp and station improvements must keep pace for transit to meet mobility demands.

New Study: People Will Use Quality Public Transit Where it is Available

The steady increase in ridership figures reported above is consistent with a new study released last spring by Paul M. Weyrich and William S. Lind of the Free Congress Foundation. In their report regarding the ability of public transit to get people out of their cars, Does Transit Work? A Conservative Reappraisal, they dispel the myth that a large percentage of people choose not to take public transportation. Weyrich and Lind point out that this is simply not the case. The authors explain that measuring transit ridership based on the percentage of total trips taken throughout the United States is simply wrong, and misleading. This is because there are large portions of the U.S. where people do not have the option of taking the bus or the train, because it is not readily available.

However, when given the choice between taking quality public transportation and driving, many people are more than willing to leave their cars at home. This is especially true with respect to those trips where transit can compete, namely, trips to work and recreation. In fact, in areas of the country where these criteria are met, public transportation use reaches significant levels, even in areas where people are entirely new to public transportation. For example, a recent poll by the Dallas Morning News found that 8 out of 10 people said Dallas Area Rapid Transit (DART) is worth the 1 percent sales tax it collects. That simply wasn't the case only a few years ago.

Investment in Rail Safety

Finally, Mr. Chairman, as the federal transit program becomes increasingly intermodal, all aspects of transportation appropriations have become important to APTA. This includes programs funded through the Research and Special Programs Administration, the Federal Highway Administration, the Federal Railroad Administration (FRA), and the Federal Aviation Administration, among others.

In this regard, APTA commends the Subcommittee for providing funding through FRA's research and development program to perform crash tests of rail passenger equipment at the Transportation Technology Center in Pueblo, Colorado. The initial tests conducted provided data that will be very useful in enhancing the safety of rail equipment. We also commend the Subcommittee for providing funds for the development of positive train control (PTC) systems, though we do urge that special consideration be given to the applicability of these systems to commuter rail operations. Crash avoidance systems such as PTC are a key to the continued development of safety in rail passenger services.

CONCLUSION

APTA supports funding the respective components of the federal transit program consistent with the full authorization levels and program structure as embodied in TEA 21. Predictable funding levels as provided through TEA 21 help America's transit agencies facilitate long term capital planning and development. This has been especially important in America's rural and small urbanized areas, where tran-

[4] Dollars & Sense, p. 77.

sit agencies are taking full advantage of the transit formula distribution set forth in TEA 21.

As we enter a new century, there has been much thinking about what we would like our future to be. In order to keep pace with our nation's growth, more than $14 billion in capital investment is needed every year to preserve and expand our public transportation infrastructure. Taking advantage of the favorable budgetary climate and surplus, now would be an opportune time for Congress to step forward as the catalyst for the ongoing renaissance of public transportation and its many benefits. Let's get the job done! We believe that public transportation has many positive impacts on the nation's economy, delivering an enormous return on your federal investment. We urge the Subcommittee to fund the federal transit program at the $7.3 billion level authorized in TEA 21.

APTA appreciates the opportunity to testify on the development of the fiscal year 2001 Transportation Appropriations Act. We would be pleased to provide additional information to assist you in your deliberations.

PREPARED STATEMENT OF THE NIAGARA FRONTIER TRANSPORTATION AUTHORITY

INTRODUCTION

My name is Lawrence M. Meckler and I am the Executive Director of the Niagara Frontier Transportation Authority (NFTA). NFTA is a regional multi-modal transportation authority responsible for air, water and surface transportation in Erie and Niagara Counties. NFTA businesses include a bus, rail and ADA paratransit system, two international airports, a small boat harbor, and transportation centers in Buffalo and Niagara Falls. I am pleased to testify today regarding NFTA's federal legislative priorities for fiscal year 2001.

NFTA recognizes the importance of a strong transportation network to the economic vitality of Buffalo and Western New York. As a result, NFTA has aggressive plans for capital and operating improvements to its surface and aviation systems. These improvements include projects to enhance and increase transit ridership and projects to expand and enhance operations at the Buffalo Niagara International Airport (BNIA) and the Niagara Frontier International Airport (NFIA).

METRO BUS AND RAIL

NFTA operates the combined bus and light rail rapid transit system. The system carries 83,000 bus passengers and 22,000 rail passengers each day over a 1,575 square mile service area. Annual system ridership totals 26.9 million passengers. The transit system's 1,100 employees operate 330 buses, 18 paratransit vehicles and 27 rail cars.

NFTA and the City of Buffalo have received discretionary bus capital fund allocations in recent years to construct an intermodal transportation center and Amtrak passenger facility. NFTA and the City of Buffalo have begun design of the project, an intermodal transportation center for NFTA buses and Amtrak as well as an intermodal connection to the Buffalo light rail system and Inner Harbor project. NFTA has begun obligating previously earmarked funds for the project.

New Bus Acquisition

NFTA seeks $5,400,000 in section 5309 discretionary funds to purchase sixteen 40 foot and two 30 foot transit buses. The new buses will replace buses purchased in 1988, which have exceeded their useful life. NFTA's total bus and rail capital assistance needs exceed the amount available to the NFTA under its annual section 5307 formula apportionment. To assist NFTA to meet its capital needs, we request priority consideration for an allocation of discretionary bus capital funding for bus purchases. The new buses will enable NFTA to continue to provide safe and reliable mobility to the Western New York Community, achieve service standard goals for rolling stock replacement, and succeed in its job access and reverse commute efforts.

Job Access And Reverse Commute Grant

NFTA seeks $500,000 in fiscal year 2001 funds under section 3037 of TEA 21 for operational expenses associated with NFTA's Job Access and Reverse Commute program. This program provides late night and extended weekend service on seven existing bus routes and improved peak hour service to address reverse commute needs on four existing routes. The service was designated, through a collaborative planning process, as a high priority for low-income individuals and welfare recipients to access jobs.

BUFFALO NIAGARA INTERNATIONAL AIRPORT

BNIA is the NFTA's second largest business center. Eight major air carriers—AirTran, American Airlines, Continental Airlines, Delta Airlines, Jet Blue, Northwest Airlines, United Airlines and US Airways—service the area, supplemented by the regional services of seven commuter carriers. The airport averages 108 daily flights and provides nonstop service to 21 cities. BNIA served approximately 3.6 million passengers in 1999.

Hold Harmless Provision

BNIA is currently undergoing major airport expansion and safety improvement projects at the airport, including the addition of seven gates. BNIA has been successful in attracting competitive air service to Buffalo, which has resulted in significant growth in air travel. As a result, the number of passenger enplanements has increased dramatically and we expect BNIA will graduate from a small hub to a medium hub in fiscal year 2001. While we are excited about BNIA's successes and the benefits of competitive air service to Western New York, BNIA will be in a serious predicament as a result of its change in hub status.

NFTA developed its financial plan for the BNIA expansion program that is under construction on the assumption that the federal government would fund 90 percent of the eligible costs of the projects undertaken at the airport, which is the federal participation for small hub airports. Because the federal participation is reduced to 75 percent for medium hub airports, BNIA will lose over $4.4 million in federal funding eligibility for the terminal expansion project alone, when BNIA transitions to a medium hub. Additionally, NFTA will lose over $1.9 million in federal funding eligibility on the acquisition of the Buffalo Airport Center property, acquired for both safety improvements and the expansion program, and as much as $2.5 million on the apron expansion and access improvement projects of the expansion program. The total funding loss will depend on the amount of federal funds NFTA receives in fiscal year 2000 before the airport transitions to a medium hub.

NFTA requests that Congress include a provision in the fiscal year 2001 transportation appropriations legislation providing that the federal share of allowable project costs for any airport project given priority consideration in either the House or Senate Report or Conference Report on Public Law 106–69 shall be no less than the federal share in effect for the airport at the time of enactment of such Public Law. NFTA also seeks to clarify that the term project means the total project and not simply the individual grant applications for a project.

BNIA Projects for Which NFTA Seeks Priority Consideration

Consistent with its expansion plans, BNIA has begun new projects that will enhance safety and improve operations. NFTA seeks priority consideration for AIP funding in the fiscal year 2001 transportation appropriations legislation for the following projects:

Runway 14–32 Safety Improvements

NFTA seeks discretionary funds to extend Runway 14–32, the crosswind runway, by approximately 1,790 feet to 7,163 feet and upgrade runway instrumentation to make the runway safe for use by commercial airlines. The extended runway will be a safe and viable alternative to the main runway, Runway 5–23, when runway 5–23 is closed or if wind conditions make takeoff from or landing on Runway 14–32 preferable. The total project cost is $43 million.

ILS & MALS Installation on Runway End 32

NFTA requests $3,848,000 in the FAA Facilities and Equipment (F&E) budget for fiscal year 2001 for the procurement and installation of an Instrument Landing System (ILS) and Medium-intensity Approach Landing System (MALS) on Runway End 32 at the Buffalo Niagara International Airport. These navigational aids will enhance the operation of Runway 14–32 and provide for safer navigation.

BNIA Projects Which Congress has Given Priority Consideration

BNIA received priority consideration in previous years for two projects that are currently underway—The Buffalo Airport Center (BAC) Acquisition and Demolition project and the airport's terminal expansion and access improvements. The BAC project will optimize clear zones, and improve protection of transitional surfaces enhancing the safety of Runway 14–32. NFTA financed the acquisition and demolition of the BAC in anticipation of FAA and New York State grant award. In January 1999, NFTA acquired the BAC property. It completed demolition of the BAC, with the exception of the removal of the slab, in December 1999. FAA has awarded grants totaling $7,720,041 for Phase I of the project and $5,602,041 for Phases II

through IV. NFTA will seek $11,486,113 in fiscal year 2001 AIP discretionary funds to complete the federal contribution to the acquisition and demolition of the BAC.

BNIA also received priority consideration for AIP funding for Phase II of the east access improvements and expansion of the east terminal apron. The terminal extension project adds seven gates to serve air service passenger demand, while the access improvements will provide safe and convenient access to the new east airport entrance and parking areas. The apron expansion is required to serve the terminal extension. NFTA will seek $2,430,900 in AIP discretionary funds to make improvements to the circulatory road system to provide convenient access to the new east airport entrance and parking areas. NFTA will seek $12,605,175 to expand the apron associated with the East Terminal expansion.

NIAGARA FALLS INTERNATIONAL AIRPORT

The Niagara Falls International Airport (NFIA) serves as a reliever airport for the BNIA. It is operated under a joint-use agreement with the U.S. military. The airport has a 9,130 square foot runway, making the airport suitable for non-stop long haul service. Air Force Reserves cargo transport units are based at the airport. One of NFIA's primary goals is to develop business in charter, cargo and general aviation markets.

NFIA Project for Which NFTA Seeks Priority Consideration—Taxiway "D" Rehabilitation

NFTA requests priority consideration for AIP funding for the rehabilitation of Taxiway "D" at the Niagara Falls International Airport. The project, which is currently underway, involves the rehabilitation of the original taxiway pavement, including drainage and lighting improvements. NFTA recently extended Runway "D" to 9,130 square feet. That project received priority consideration in the fiscal year 1998 and 1999 transportation appropriations legislation. The importance of rehabilitating the original pavement is underscored by the fact that FAA rated the pavement fair to poor in its Pavement Management Study. The total cost of the taxiway rehabilitation project is $925,000.

Thank you for the opportunity to testify regarding NFTA's federal legislative priorities. We have an aggressive agenda, which will result in improved transportation services for residents of and visitors to the Buffalo region and will benefit the Western New York economy.

PREPARED STATEMENT OF THE STATE OF NEW JERSEY

Mr. Chairman and Members of the Subcommittee: Thank you for the opportunity to submit testimony. I am Jim Weinstein, Commissioner of Transportation for the State of New Jersey and Chairman of the Board of New Jersey Transit.

To begin, I wish to express the appreciation of the people and State of New Jersey for the hard work and fine efforts of this Subcommittee, its leadership, its members and its staff, which are so critical to the annual appropriations process. Your good work makes possible considerable financing which is key to the safe, effective and efficient transportation network so important to our nation.

I want to provide you with a short overview of what we are doing in New Jersey to address the very real transportation challenges of the nation's most densely populated state, and to indicate where federal appropriations in transportation provide a significant impact and role in meeting those challenges which affect us all.

New Jersey is not big geographically, but our transportation needs are great. We realize that traffic congestion and aging infrastructure are two major issues demanding our attention, so that commerce—international, national, regional and local—continues to prosper. We recognize our responsibility not only to the residents of our state, but also to the many visitors, users and beneficiaries of transportation in New Jersey.

We have some of the worst traffic congestion in the nation. This is taking its toll on our infrastructure, our economy, our air quality and our citizens. Our success in dealing with this challenge depends on the ongoing partnership between the State and the Federal Government. The State of New Jersey has dedicated a full 40 percent of our state Transportation Trust Fund to public transit this year. We match the federal contribution to our transit capital program on a dollar-for-dollar basis, and the financing for our new start transit project in southern New Jersey is entirely state money.

We are making great strides in New Jersey to alleviate our traffic problems. Public transit ridership in our state is at an all-time high, with approximately 360,000 daily riders on our bus and rail system. The Hudson Bergen Light Rail System be-

tween Bayonne and Exchange Place in Jersey City will open this Spring. A new station on the Northeast Corridor will serve Newark Airport starting in 2001. Our Secaucus Transfer rail project will be completed on time in 2002. Our MidTown Direct service, which opened in 1996, has attracted significantly more riders than anticipated.

We have more work to do, and I ask for your continued support so that we can achieve our goal of a single, seamless intermodal transportation network. This year, we are seeking funding for several important transit and rail projects that will further the connectivity of our state's transportation network.

First and foremost is the Hudson Bergen Light Rail Line. New Jersey is seeking, consistent with its Full Funding Grant Agreement, $121 million for fiscal year 2001 for the first segment of the project. When completed, this new rail line in the nation's sixth-most-densely-populated county is expected to carry 100,000 daily riders. The project complements and serves the tremendous economic growth this area is experiencing.

As construction of the first segment is nearing completion, we intend to move directly into design and construction of the second segment. We are currently negotiating a Full Funding Grant Agreement with FTA which will enable us to finance the second segment. While we will not actually be seeking federal funding for the second segment this year, this Committee's support is critical if we are to get the Full Funding Grant Agreement signed this year so that we do not lose momentum on this important effort. Your support in this endeavor is greatly appreciated.

Additionally, we are requesting $47.5 million in fiscal year 2001 for construction of a new light rail line connecting Newark's Broad Street Station with Newark Penn Station. A Full Funding Grant Agreement with FTA is pending. The construction of this vital link will allow riders on our Morris and Essex lines to transfer to the Northeast Corridor, which will also allow connection to our new Newark International Airport Station. It will provide 13,000 daily riders from both rail lines with access to offices, shopping and other destinations in downtown Newark—and alleviate congestion.

We have also identified a significant rail connection needed to improve the national and regional flow of freight rail through New Jersey, which until recently had been focused on an east-west orientation but is now increasing its focus on north-south. A major bottleneck has developed in New Jersey at Marion Junction (Jersey City)—an impact directly related to the national rail mergers of recent years. Built to provide a smooth flow of traffic from the north, this single-track structure must now also provide for flows from the south destined to northeastern markets, as a result of the recent takeover of Conrail by the Norfolk Southern and CSX Railroads. To accommodate these bi-directional flows by two railroads, the structure must be "twinned." Additionally this project will enable the railroads to vacate the former Conrail River Line east of the Palisades, in order to free up that right-of-way for the future phase of the previously described Hudson-Bergen Light Rail Transit System. The Marion Junction rail improvements are estimated at $30 million over the course of the project, and we seek your consideration of this because of its national implications.

An additional transit request is an earmark in the bus category to assist in purchasing new buses to replace aging ones currently operated by both NJ TRANSIT and private carriers in our state. We need approximately 300 new buses to serve the large commuter market between New Jersey, New York and Philadelphia. I ask that you consider an earmark for the purchase of new buses at $400,000 per bus.

While we are asking for significant monies for public transit in New Jersey, that investment has impacts throughout the country. We are purchasing buses produced in Roswell, New Mexico, with engines built in Columbus, Indiana. Another fleet of buses is assembled in Pembina, North Dakota, with engines built in Pontiac, Michigan and transmissions made in Indianapolis, Indiana. We have major bus components and systems produced in Alabama, California, Georgia, Illinois, Kansas, Minnesota, Ohio, Pennsylvania and Texas, and we have a contract for rail cars to be built in Hornell, New York. So you can see that the federal investment in New Jersey's public transit system employs workers and builds local economies all over the nation.

Let me again emphasize New Jersey's commitment to our own transportation network. Governor Whitman recently announced her plan in our state budget to provide one billion dollars in funding for transportation in the next fiscal year alone.

New Jersey DOT is about to begin construction on the first projects of its Portway initiative—a series of freight system improvements that will strengthen direct access to and between the Newark-Elizabeth Air/Seaport Complex and intermodal rail, truck and warehouse/transfer facilities located within or near a linear corridor of about 12 miles. We have allocated State funding on the order of $50 million to re-

place a significant truck route bridge and related improvements in the City of Newark. Multi-billion dollar transportation investments are planned for the area by the State and the region's transportation authorities, most notably the Port Authority of New York and New Jersey. By properly coordinating the many transportation projects of Portway, the nation will benefit from the resulting regional improvements in this critical corridor.

We have a vision of a single transportation network that is the backbone of an economy—seamless, integrated systems from air travel, to rail, to ferry, to bus and to car; moving large numbers of people and goods fluidly through an intermodal network; alleviating congestion, de-stressing our citizens and improving our environment. This network is within our grasp, and I ask that you help fuel its creation by funding its construction.

In conclusion, we look forward to the opening of the first part of the Hudson Bergen Light Rail Transit System in the next few months. On behalf of the State of New Jersey, I am sure I am joined by our senior Senator, Frank Lautenberg, in inviting the members and staff of the Subcommittee to visit New Jersey to see this new light rail system, as well as the Portway district, and to personally view the first results of what you have made possible in our transportation system in New Jersey, that serves our region and the nation.

PREPARED STATEMENT OF THE COLONIAL WILLIAMSBURG FOUNDATION

Mr. Chairman and members of the Senate Transportation Appropriations Subcommittee, I want to thank you for the opportunity to submit this testimony on behalf of the Colonial Williamsburg Foundation.

As many of you may know, Colonial Williamsburg is America's largest outdoor living history museum spread over 170 acres with more than 600 original and reconstructed buildings. I hope many of you have been part of the three million visitors Colonial Williamsburg attracts annually . . . coming to hear the voices of Washington, Jefferson, and Henry remind us all of America's rich history, while educating and exciting our visitors about our country's democratic principles and ideals.

Ever since John D. Rockefeller, Jr.'s vision of the restoration of Williamsburg began in 1926, the Foundation has been faithful to Mr. Rockefeller's mission statement, "that the future may learn from the past." We are active stewards of our American culture and principles, and we consider this a responsibility we owe to all the people of our nation as well as nations struggling to create democratic republics.

In the next five years, Colonial Williamsburg will be engaged in the largest preservation effort since the restoration of the Historic Area living museum began in 1926. This second restoration effort is being undertaken to ensure that we are ready for our 75th anniversary and the 400th anniversary of Jamestown in 2007.

As part of the more than $150 million dollar effort, we must upgrade and expand our visitor center. This project has the enthusiastic support of the Jamestown/Yorktown Foundation, the National Park Service, the Association for the Preservation of Virginia Antiquities, Busch Enterprises, the Hampton Roads Partnership, the College of William and Mary, as well as the local Chamber of Commerce, the three local municipalities, and the local hotel and motel association.

Part of this visitor center project involves the construction of an intermodal bus hub that will be the center for a new bus service that will carry passengers to Jamestown, Yorktown, and Colonial Williamsburg via the National Park System's Colonial Parkway. The National Park System has already agreed with our proposal for this bus system and approved the use of the parkway for this purpose. Since there are only two, two-lane roads to Jamestown, a bus system will be essential to ease traffic congestion and potential environmental impacts from increased numbers of visitors to this important national Historic Triangle area. Our plans call for increasing our parking area to provide spaces for 3,000 cars and 250 tour buses at one time. Families will be able to leave their cars and travel to the three historic sites, and to other local attractions, such as Busch Gardens and Water Country. Plans are also being made to provide for bus service from this intermodal hub to other museums and attractions throughout the lower Virginia peninsula. In addition the hub will be used as a link for the bus systems of James City County, the College of William and Mary and Colonial Williamsburg for the purposes of an integrated transit system for the greater Williamsburg area.

While the Colonial Williamsburg Foundation is engaged in a comprehensive fundraising campaign to secure private funds to cover much of the cost of this restoration and expansion for 2007, we are also seeking public funds as part of a private-public partnership. It is our hope that federal funds could be made available to cover part of the cost of the intermodal bus hub. We will also need help in replacing

8 diesel buses that have far outlived their expected life span. We have been slowly replacing our buses with more environmentally friendly and efficient natural gas buses. We will, however, have to purchase 10 additional natural gas buses in order to meet the needs for the service we want to provide from our intermodal bus hub. New natural gas buses are, as you know, initially more expensive, but in the long run more efficient and less polluting. The cost for each bus is approximately $230,000.

In order to assist Colonial Williamsburg in this significant effort and to ensure the restoration work can be accomplished on time, we will be seeking $3 million. This funding will allow us to purchase three natural gas buses in the next year and cover part of the costs associated with developing the intermodal bus hub. We will appreciate any assistance that you may be able to recommend.

Thank you for your consideration. We hope to have you as our guests at Colonial Williamsburg in the near future.

PREPARED STATEMENT OF THE CITY OF GAINESVILLE, FLORIDA

Mr. Chairman: On behalf of the City of Gainesville, Florida, I appreciate the opportunity to present this written testimony to you today. The City of Gainesville is seeking federal funds in the fiscal year 2001 Transportation Appropriations bill to assist with the following two projects: (1) an innovative Joint Communications Technology Project the City is undertaking to improve public safety, and (2) continuation funding for our Bus and Bus Facilities Project.

JOINT COMMUNICATIONS TECHNOLOGY PROJECT

The City of Gainesville is seeking $5.4 million for a joint communications technology project to enhance public safety. The goal of this effort is to facilitate communication between our urban area public safety agencies through the use of system-wide communications software and technology upgrades. The City and Alachua County have initiated a joint communications system for the future. The impact for the entire region is considerable, since this county serves as the regional center for much of rural north Florida's medical care, disaster management, and criminal justice services.

The agencies involved in this project are: Alachua County Government (14 internal user agencies), Alachua County Sheriff (includes Corrections Facility and Civil Division); Cities of Gainesville (8 internal user agencies), Archer, Newberry, High Springs, Alachua, LaCrosse, Waldo, Melrose, Hawthorne, and Micanopy; School Board of Alachua County, Santa Fe Community College, University of Florida, Gainesville-Alachua County Airport Authority, Gainesville Regional Transit and Gainesville Regional Utilities (electric, gas, water, wastewater, telecommunications).

To continue the Joint Communications Technology Initiative to the next step requires the purchase of enhanced software and new equipment. The urban area public safety agencies will need the following:

—Mobile Lap Top Computers /Data Terminals for urban area public safety agencies ($4.8 Million)
—Crash Reporting Software for urban area law enforcement agencies ($120,000)
—System-Wide Communications Software ($200,000)
—Geographical Information System (GIS) Software and WEB Software ($280,000)

The need for the addition of lap top computers to this system is partially driven by the Federal Government's "re-farming" of radio frequencies through the Federal Communications Commission. Due to this "re-farming" and the high cost of radios, law enforcement agencies will no longer have radios mounted in department vehicles. Radios "mounted" in vehicles traditionally have a much higher wattage output and therefore are more reliable and robust than portable radios. Additionally, portable radios can be lost or damaged during emergency incidents. This creates a critical need for an alternative means for officers to be able to communicate with the dispatch center. Mobile lap top computers with the additional communication and software components can become the secondary means of communication utilizing the infrastructure currently being developed for the Alachua County Joint Communication Center.

The use of lap top computers can fulfill the critical need for a second communication device, and at the same time help accomplish several other public safety objectives, including in-car computer aided dispatch, automated report writing and the use of a GIS (Crime Mapping, etc.).

RESULT # 1 MOBILE COMPUTER AIDED DISPATCH

Utilizing lap top computers as in-car computer aided dispatch terminals significantly increases public safety officers' communications ability. Computers used in this manner can perform many important tasks.

First, the computers can send and receive information between the officer and the dispatcher, including calls for service. Non-emergency calls are forwarded from the dispatcher to the appropriate unit without the need to transmit the information verbally over the radio, thus saving "air-time" for use in emergency situations. This also improves the reliability of the information communicated and virtually prevents the need for the information to be repeated. This also decreases the need for additional dispatchers even when the number of calls for service increases.

Secondly, officers and supervisors can find the location of other officers and check on their current status. This eliminates the need for officers to request this information from a dispatcher and gives all members of the agency a complete picture of the availability of officers for calls for service. Officers can also refer to information about calls that have not yet been dispatched in addition to information regarding previous calls for service.

Third, officers can communicate vehicle-to-vehicle. The computers can be used to send messages from one officer to another. This also eliminates the need for officers to waste "air-time" for less important transfer of information.

Fourth, law enforcement officers can conduct FCIC/NCIC checks on wanted persons and stolen vehicles without having to tie up a dispatcher. This allows officers to check a large number of persons and vehicles, which will significantly increase the number of people who are arrested for warrants and the number of recovered stolen vehicles. A single dispatcher can only handle 1 request at a time, while the computer system, can handle numerous request all at the same time.

RESULT # 2 MOBILE AUTOMATED REPORT WRITING

Area law enforcement officers currently hand write law enforcement reports that are manually filed. A small portion of that report is then entered into a computer database at some later date. The benefits to public safety of mobile automated report writing are numerous.

First, the time lapse between when a report is started and the time that is entered into the computer is virtually eliminated. As a result, analysis of the information is immediately available for enhancing resource utilization.

Second, the time now spent on satisfying requests for copies of paper-based reports and completing those requests can be better spent on activities directly impacting public safety. Once filed, electronic reports could be forwarded to anyone electronically as appropriate.

Third, the amount of storage space now required to house all of the completed law enforcement reports could be freed up for better use. Now, for example, reports are only kept at the police department for 3 years. The reports are then removed from the file one at time by a records technician. The reports are then re-filed in a new folder and transported to a storage warehouse. Any report over three years old, must be retrieved from a storage company warehouse. Electronically filed reports take up virtually no space at all and can be electronically backed up for security purposes and stored on some form of optical disk. This would eliminate the need for an entire room to store reports.

Fourth, electronic reports can be created that will take the data required for one report and automatically enter it on subsequent or additional report forms. Now, an officer might be required to enter the information on several report forms, including the original report, a sworn affidavit, a vehicle tow sheet, a forfeiture request, an ATF firearms report, etc. Thus filing the reports electronically would save the officers significant time more urgently needed for public safety-related activities.

Finally, many handwritten reports are nearly illegible and have numerous spelling and grammatical errors. Some of the current report forms are also 4 or 5-part NCR paper. Usually only the first one or two copies of the NCR forms are legible. Filing reports electronically would drastically reduce the number of spelling and grammatical errors, it would allow officers to easily correct errors in reports, and it would eliminate the need for NCR paper.

RESULT # 3 GEOGRAPHICAL INFORMATION SYSTEM (GIS)

For years Law Enforcement Agencies have tracked crime using pin maps to geographically show where crimes were occurring. This method of tracking crime has become impractical and too time-consuming for all but the smallest of law enforcement agencies. The advent of computerized geographical information programs, like

"ArcView" has enabled law enforcement agencies to return to the pin map method of displaying crime patterns, but in a much more effective manner. Additionally, mapping programs can contain several hundred data layers that can be utilized by numerous public and private agencies. The following objectives are examples of how a GIS system will enable us to use the information immediately entered on mobile lap top computers.

Electronic Pin Maps.—Once a GIS system is established, all reports that are generated will be mapped in several formats. Maps will be generated for calls for service. This enables agencies to properly decide where to deploy their limited resources. Electronic pin maps also can be made time sensitive as well as location sensitive. Officers working various shifts can identify hot spots by time and location. A hot spot during the day, may not be a hot spot at night, or visa versa. Additional maps can be generated for UCR (Unified Crime Reports) crimes, Crime Analysis identified crimes, and calls verified by Florida State Statutes. Information that is not immediately available is of little or no use when it is entered at a later date.

Management of Resources Utilizing Computer Statistics.—Many law enforcement agencies have begun to use a method of management which utilizes crime data. Law Enforcement supervisors are being held accountable for the level or increase in crime in their assigned geographical area. The Gainesville Police Department has begun the process of dividing the City into districts. Each District Commander will be held responsible for the criminal activity and the utilization of resources in that geographical area. GIS information will be used to manage the department's limited resources.

WEB Mapping.—Sharing the information gathered in an effective manner is another key component to this process. Many of the Law Enforcement Agencies in Alachua County currently have a WEB site on the Internet. In the future, crime maps developed by the GIS system will be used to display maps over the Internet. Maps will be made available to other law enforcement and governmental agencies and the public at large.

Integration with other Agencies.—In order for a geographical information system to be truly effective, it requires the cooperation of several agencies. GIS systems with hundreds of layers of data can be a useful tool for all the cooperative agencies. Law Enforcement personnel will be able to view maps and aerial or satellite photographs of any given area of the city. Crime data and analyses can be placed on top of those maps and/or photographs at specified points that will be available to all users. Law enforcement personnel will provide numerous layers of data to the system and will in return be able to access the layers from other agencies. Alachua County already has begun the process of developing a GIS and the Gainesville Police Department is currently working with the University of Florida to develop a method of converting data to a format used by "ArcView".

BUS AND BUS FACILITIES PROJECT

Pursuant to the fiscal year 2000 Transportation Appropriations Bill, approximately $0.5 million was reserved for Gainesville. The City continues to pursue the $5.5 M that represents the remainder of the original funding request. (The original request was for funding assistance to purchase 25 new buses at an approximately cost of $7.5 million.) The balance will be used to purchase 19 ADA accessible buses. The City is continuing to work with Alachua County, the University of Florida and the Florida Department of Transportation to enhance bus service in the metropolitan area.

Nineteen buses will replace used buses acquired from several other transit systems to demonstrate the feasibility of this major expansion of service to the University of Florida. The operation of these buses will be supported by a unique partnership of the City of Gainesville, Alachua County, the University of Florida, the Florida Department of Transportation and the University of Florida Student government.

The University of Florida Presidential Task Force on Parking and Transportation recommended an increase of 25 buses to serve the commuting needs of UF students, faculty, and staff. The University of Florida student population is currently estimated at 50,000 students.

The City of Gainesville through its Regional Transit System has brought together the University of Florida, Alachua County, and the Florida Department of Transportation to implement the recommendations of the University of Florida Presidential Task Force. Service utilizing eight buses was implemented to enhance several routes serving the UF campus from Southwest Gainesville.

The enhanced service has already resulted in record-breaking ridership for RTS during the past year. Express service utilizing two additional buses from an off-cam-

pus park-and-ride lot is currently operational. The University of Florida Student Government has implemented a student transportation fee that allowed unlimited access to all RTS routes by all 50,000 current UF students. In addition, a fee increase has been approved for the upcoming year. The University of Florida, the City and the County will be implementing a bus pass program for City and County employees as well as University of Florida faculty and staff to allow unlimited free access during the current year.

In closing, federal support is critical for these initiatives. As a result, we respectfully request that the Subcommittee give funding assistance for our projects every consideration throughout the fiscal year 2001 appropriations process.

PREPARED STATEMENT OF THE MEMPHIS AREA TRANSIT AUTHORITY

The Memphis Area Transit Authority (MATA) respectfully requests that the Senate Appropriations Subcommittee on Transportation make provision for an allocation of $14,174,990 in "New Start" funds for the Memphis Medical Center Rail Extension in its fiscal year 2001 bill making appropriations for the Department of Transportation and Related Agencies. The Clinton Administration has proposed this level of funding for the project and is working to draft a Full Funding Grant Agreement (FFGA) to submit to Congress later this year. We also request the support of the Committee in execution of the FFGA.

OVERVIEW

The Medical Center Rail Extension is a two-mile rail project in downtown Memphis, Tennessee. The project represents an eastward expansion of the existing 5-mile Main Street Trolley/Riverfront Loop rail system. This project is proposed as the last segment of the downtown rail circulation system as well as the first segment of a regional light rail line. The two-mile extension will add six new stations and a park-and-ride facility.

The Medical Center Rail Extension has been designed to link the two largest employment centers in the region—the Central Business District and the Medical Center—and accommodate increased trip demand generated by new development along the line. Examples of new development include a new Triple AAA baseball park (opened on April 1), a new elementary school (under construction), and a major new apartment complex of 375 units (under construction). Existing development in the Medical Center area includes seven hospitals, four colleges and universities, and various related businesses and retail establishments.

Ridership on the two-mile extension is projected to be 2,100 per day in the year of opening (2004) and will increase to 4,200 in the forecast year (2020).

The Medical Center Rail Extension is expected to be a catalyst for redevelopment and a tool to enhance the livability of the Medical Center area in much the same way as the Main Street Trolley/Riverfront Loop has helped to transform the Central Business District.

BACKGROUND

Since implementation of the Main Street Trolley in 1993 and Riverfront Loop in 1997, ridership has grown steadily each year. In calendar year 1999, 922,475 riders were carried representing an increase of 13 percent over 1998. Data for January–March 2000 show usage up by 30 percent over the first three months of last year.

The Main Street Trolley/Riverfront Loop has been credited with playing a major role in the rebirth of downtown Memphis and its emergence as an entertainment center and focal point for urban residential development. The limits of activity have been stretched north and south in part as a result of implementation of joint use transportation terminals at each end of the line.

STATUS AND SCHEDULE

Preliminary Engineering has been completed. MATA expects Final Design approval and a Finding of No Significant Impact (FONSI) from FTA in early April. The project schedule calls for development of 60 percent engineering plans and determination of cost estimates by July 2000 with submittal of the FFGA package to Congress by August 1, 2000. Construction will be done in phases, with utility relocation beginning late in calendar year 2000, followed by bridge construction in early 2001, and general construction in mid-2001. Revenue operation is projected to begin in early 2004.

The project was rated "Recommended" by FTA in the Annual Report on New Starts for fiscal year 2001.

FUNDING AND COST

The Medical Center Rail Extension has received earmarks from Congress in the past several years, as follows:

Fiscal year:	
1996	$1,250,000
1997	3,039,000
1998	1,000,000
1999	2,200,000
2000	2,500,000
TOTAL	9,989,000

The Administration's fiscal year 2001 Budget proposes an FFGA and funding totaling $14,174,990 in fiscal year 2001. The complete funding schedule for the project is as follows:

Funds Appropriated [1]	$8,932,176
Fiscal year:	
2001	14,174,990
2002	14,826,027
2003	17,334,958
TOTAL FEDERAL	55,268,151
TOTAL COST	69,085,189

[1] Less monies expended for Preliminary Engineering and allocated to FTA's Project Management Oversight (PMO) program.

SUMMARY

We urge the committee to appropriate the recommended funding of $14,174,990 in fiscal year 2001 in order to allow MATA to continue to build on the past success of the downtown rail system. A substantial appropriation is needed in fiscal year 2001 in order to maintain our broad base of local support and keep the project on schedule. Your past assistance is greatly appreciated and we look forward to continuing the partnership.

PREPARED STATEMENT OF EASTER SEALS

Mr. Chairman, I am Courtland Townes, III, Director of Services for the Boston Center for Independent Living, Inc. in Boston, Massachusetts. I am pleased to have the opportunity to submit testimony on behalf of Easter Seals in support of Project ACTION. I currently serve on the Project ACTION National Steering Committee. The National Steering Committee is comprised of members of both the transit and disability communities who support Project ACTION and work to ensure that the Project's resources are devoted to the most critical transportation accessibility issues facing the transit and disability communities. On behalf of the people with disabilities and transit operators that we represent, I want to say that we are grateful for the Senate Transportation Appropriations Subcommittee's ongoing support for Project ACTION.

I work at an Independent Living Center in Boston and am also active on the national level promoting disability issues as the Chair of the Civil Rights Subcommittee of the National Council on Independent Living. I know that many people are not yet familiar with the Independent Living movement so please permit me to provide some brief background. Independent Living is a philosophy and a movement of people with disabilities who work for self-determination, equal opportunities and self-respect. At the most basic level, Independent Living means that people with disabilities expect and deserve the same choices and control in our everyday lives that our non-disabled brothers and sisters, neighbors and friends take for granted.

We want to grow up in our families, go to the neighborhood school, use the same bus as our neighbors, work in jobs that are in line with our education and abilities, and start families of our own. Just as everybody else, we need to be in charge of our lives, think and speak for ourselves. To this end we need to support and learn from each other, organize ourselves and work for political changes that lead to the legal protection of our human and civil rights.

This is the movement and philosophy that you and your congressional colleagues embraced nearly 10 years ago when you enacted the landmark Americans with Disabilities Act of 1990 (ADA). In passing the ADA, you and your colleagues recognized that, without access to transportation, people with disabilities could not benefit from

the promise of full participation in society. I am submitting this statement to thank you and to let you know how important Project ACTION is in the march toward full integration and equal participation of people with disabilities.

As we approach the ADA's tenth anniversary in 2000, we should take note of the tremendous progress we have made in recent years in terms of transit access. The 1998 Survey conducted by Louis Harris & Associates polling firm for the National Organization on Disability demonstrated some of this progress. In 1986, 31 percent of people with disabilities who were unemployed stated that lack of access to accessible transportation prevented them from working. In 1998 this percentage dropped to 24. It is too early to declare victory. Still one quarter of the survey participants say that the lack of access to transportation is an important reason they were not working, but we are clearly headed in the right direction.

Accessibility is increasing all across America: bus fleet accessibility has grown; rail station access has increased; and most importantly the disability and transit communities have learned to work together instead of meeting only in street protests and in costly courtroom battles. Project ACTION is the singular, most positive force bringing the transit and disability communities together. In recent years you have heard testimony in support of Project ACTION from both transit and disability leaders. The Project's broad-based support from groups that have historically had an adversarial relationship is a testament to its success at seeking cooperative solutions.

Despite this progress there are still issues to resolve. But thanks to Project ACTION the disability community and the transit community have a forum to work toward solutions in a cooperative fashion. Through this cooperation we in the disability community have learned that many, though not all, transit operators are earnestly working toward compliance with the ADA and trying to provide the best quality service to all Americans—those with disabilities and those without. But these transit operators need ongoing assistance and guidance on transportation accessibility issues. And people with disabilities need to understand their rights and responsibilities under the ADA. This is where Project ACTION has played and can continue to play a vital role.

With the support of this subcommittee in recent years, Project ACTION has become the principal resource of tools, training and procedures to make the ADA work. Since this subcommittee established Project ACTION, it has sponsored innovative research, funded demonstration projects, provided technical assistance to hundred of transit providers, and developed an impressive resource center with information on the most cost-effective ways to achieve accessibility.

Let me briefly describe some major initiatives that the Project completed since we last submitted testimony to this subcommittee. In June 1999, Project ACTION hosted two National Technical Assistance Conferences, one in Dallas and the other in Portland, Oregon. These conferences provided transit operators with every available resource to implement cost-effective ADA compliance strategies. Conference topics included:

—Reducing paratransit costs by transitioning riders from paratransit to fixed route service
—Solving rural transportation issues
—Ferry and other water vessel accessibility
—Serving passengers who use seeing eye dogs and other service animals
—Training transit operators to make stop announcements
—Dispute resolution principles.

This brief overview of these topics demonstrates that accessible transportation encompasses so much more than just bus lift operations for passengers in wheelchairs. Project ACTION has developed tools and resources in all areas of accessibility. These conferences succeeded in getting tools directly in the hands of the transit operators that need them.

Last year we told you that we would reach out to the Over the Road Bus companies to bring this industry into compliance with the ADA and to open up intercity, cross-country and tour and charter travel to people with disabilities. And this has and continues to be a primary focus for Project ACTION. In conjunction with the American Bus Association and a core group of operators, we have developed an educational package and scheduled training events specifically tailored to the unique needs of motorcoach operators.

The demand for Project ACTION information is strong and continues to grow. We have new products on many of the significant issues facing the transit and disability communities. We have developed guidance for AMTRAK to help meet the needs of disabled rail passengers and also created web-based software to assist rail systems in evaluating the ADA accessibility of their facilities. We have also developed a best practice guide to providing accessible water transportation on passenger ferries.

We are meeting much of the demand from customers for information through the Project ACTION website. We now have an Accessible Travelers Database online. One of the challenges for passengers with disabilities when they travel from place to place is not knowing what level of accessible service exists in any location. To help prevent the unpleasant surprises many disabled passengers face, we now have over 1,400 accessible transportation providers listed online for trip planning purposes. The Project ACTION website has received over 212,000 visitors in calendar year 1999.

In the first quarter of fiscal year 2000, Project ACTION:

—Handled orders for 2,000 documents

—Responded to over 3,000 calls for assistance of various kinds

—Produced and distributed the Project ACTION Update to over 14,000 individuals and transit agencies

—Received 85,000 visits to the Project ACTION Webpage.

As this subcommittee has requested, we continue to work closely with officials at the Federal Transportation Administration to coordinate and plan project activities. Working with FTA, Project ACTION is developing a 5-year strategic plan that will guide the activities of the organization.

In February, Easter Seals submitted its fiscal year 2000 federal application to the Federal Transit Administration. This document outlines how Project ACTION will spend the $3.0 million in support that this subcommittee approved in the fiscal year 2000 appropriation bill. The funding that you provided will enable us to greatly expand our activities. New activities that Project ACTION will undertake in the near future based on requests from the field include:

—Hosting an event to teach transit professionals how to measure the benefits of accessible public transit

—Creating a "turnkey" package for transit systems that will allow them to assess, train and mentor new fixed route customers with disabilities. And also provide driver sensitivity training and customer service monitoring

—Providing direct technical assistance to motorcoach operators to help them serve passengers with disabilities.

On behalf of the millions of people with disabilities who rely on public transit, Easter Seals thanks this subcommittee for its past support of Project ACTION. As we look toward the future, Project ACTION's main focus will be to continue to find and implement creative and cost-effective methods to promote ADA compliance and to reduce the rising costs of paratransit. As a person who works on a full time basis to promote civil rights for Americans with disabilities, I want to emphasize how important the march toward 100 percent transit accessibility is and to recognize the vital role that Project ACTION plays in this struggle.

On behalf of Easter Seals, I respectfully request this subcommittee to provide $3.0 million dollars to fund Project ACTION in fiscal year 2001. This funding level will ensure that Project ACTION can continue to develop and disseminate workable solutions to the most critical issues facing transit operators as they implement the ADA. We understand the fiscal constraints under which this subcommittee operates. However, Project ACTION is a credible, cost-effective, and creative program that has strong support in both the disability and provider communities and with the Federal Transit Administration. The spirit of cooperation would not be possible without the leadership of this subcommittee. Easter Seals is grateful for your support and we look forward to continued collaboration.

Thank you.

PREPARED STATEMENT OF THE PORT AUTHORITY OF ALLEGHENY COUNTY

Chairman Shelby and members of the subcommittee, it is my pleasure and honor to submit testimony on behalf of Port Authority of Allegheny County, the principal public transportation provider in the Pittsburgh urbanized area. Port Authority carries over 76 million public transportation riders annually over a 730-square mile area including the City of Pittsburgh. We operate and oversee a variety of services including bus, busway, light rail, incline, and the nation's largest specialized paratransit system known as access.

As chief executive officer of Port Authority of Allegheny County, it is my privilege to present this testimony regarding Port Authority's request for fiscal year 2001 transportation appropriations "earmarks" for two very exciting and important projects for the Pittsburgh urbanized area—the north shore connector and the stage II light rail transit projects, both of which are major components of Port Authority's "rail 21" program.

I will also be including in my testimony a funding request for the purchase of buses.

For fiscal year 2001, Port Authority is requesting $25 million of section 5309 "new start" funds for the north shore connector and $40 million for the stage II light rail transit projects. Port Authority is also requesting a section 5309 "bus/bus facility" earmark of $20 million to be used to acquire approximately 80 buses in fiscal year 2001. Procurement of new buses will enable Port Authority to continue modernizing its fleet and ensure the continuation of quality transit service to its customers.

"RAIL 21" PROGRAM

North Shore Connector

The heart of the Pittsburgh metropolitan region is its golden triangle, the center of business, employment, cultural and sporting events, tourism, and government services. In order to accommodate and facilitate its continued growth and vitality, there is pressing need to better integrate the north shore area with the golden triangle by providing much improved transit service along the downtown's Allegheny River corridor. This corridor encompasses the north shore, cultural district and strip district areas of downtown and is the region's premiere tourist destination with three rivers stadium (the home of the Pittsburgh Steelers and Pirates), the Carnegie Science Center, the International Andy Warhol Museum, the National Aviary, the David L. Lawrence Convention Center, three performing arts theaters, and the Senator John Heinz Pittsburgh Regional History Center all located within this approximately one-square mile corridor.

Within this corridor, there are also significant levels of downtown commuter parking and private and public development projects. During the day, a large reservoir of parking on the north shore provides much needed fringe parking for the golden triangle. In turn, the golden triangle provides a significant amount of needed parking for north shore events. Providing a better connection between the two areas will fortify and enhance this relationship.

Development projects in the corridor include the Aluminum Company of America's (ALCOA's) new corporate headquarters, a 240-unit apartment complex, a new baseball park, a new football stadium, a new and expanded convention center and hotel, an office building, a new theater, parking facilities, and an accompanying retail and entertainment complex.

Absent in this corridor are pedestrian friendly and efficient transportation connections tying together these various attractions and development projects and linking the corridor with the region's transportation infrastructure. Overall, improved linkages between the north shore, central business district and the station square area, will help ensure the continued vitality and accessibility of the region's core and enhance and support the private and public development currently underway.

Since 1985, downtown Pittsburgh has been served from the south hills as part of an overall 25-mile light rail transit system. A fixed guideway transit connection from the north shore to Port Authority's existing light rail system would enhance transit service to the north shore area and better integrate golden triangle, north shore and station square activities including regional attractions. the north shore connector will:

—Support the economic development activities of the north shore, such as the new ALCOA headquarters, a 240-unit residential development, a riverfront park and the new baseball and football stadiums.

—Improve access to current job and activity centers, such as the Carnegie Science Center, Andy Warhol Museum, convention center, the national aviary, cultural district and other entertainment and cultural destinations on the north shore.

—Provide a direct transportation connection between north shore job and activity centers and the south hills job and activity centers serviced by Port Authority's light rail transit system, the "T".

—Tie the north shore, downtown and station square together in a way that would benefit all three business districts.

—Improve transportation for the one million annual visitors to the cultural district in downtown Pittsburgh and the more than three million people who annually visit the north side, including fans of the pirates and steelers.

—Provide convenient transfers to other public transit service and facilities, including the Martin Luther King, Jr. east busway, the west busway/Wabash hov facility, Port Authority's bus service network, the I–279 hov lanes and Amtrak and Greyhound service.

—Continue to improve and expand public transit services for the citizens of Allegheny County.

—Furthers Port Authority's effort to expand its LRT system into the north side, strip district and other areas in the Pittsburgh region.

The Draft Environmental Impact Statement (DEIS) is currently being reviewed by the Federal Transit Administration (FTA) with approval expected within the next 30 days. The DEIS includes cost of the most likely alternative at $390 million.

LIGHT RAIL TRANSIT STAGE II SYSTEM

Port Authority's light rail transit system, also known as the "T", is a 25-mile light rail transit system serving the City of Pittsburgh and the south hills communities of Allegheny County.

The south hills light rail system, part of an extensive trolley network formerly operated by the Pittsburgh Railways Company and its predecessors, was acquired by Port Authority in 1964. Between 1980 and 1987, Port Authority completely reconstructed 10.5 miles of the system, a project referred to as stage I.

Stage I entailed construction of the downtown Pittsburgh subway and rehabilitation of Port Authority's panhandle bridge over the Monongahela river, modernization of the old trolley line through Allegheny County's south hills via Beechview and Mount Lebanon, construction of a new Mount Lebanon transit tunnel, construction of a new rail car maintenance facility and operations control center and purchase of 55 articulated and air-conditioned light rail cars. Also included in stage I was the completion of the 2.5-mile Allentown line in 1992.

The stage II light rail transit system which was designated a "new start" project in the Intermodal Surface Transportation Assistance Act of 1991 (ISTEA) involves the reconstruction of 12.5 miles of the overbrook, library, and drake trolley lines to modern light rail standards. Preliminary engineering was completed for the project in spring 1998. Rebuilding the three lines on their existing alignments includes double-tracking the overbrook line, replacing bridges, stabilizing slopes, adding retaining walls, constructing new stops and stations, and installing signal, communications and electrical power systems. All three lines are also to be built to modern light rail standards. The project includes the acquisition of 28 new light rail vehicles, and approximately 2,400 new park and ride spaces. The current project is estimated to cost a total of $512.5 million. Among other benefits, the reconstruction of the stage II line would promote economic development opportunities, offer shorter travel time, add much needed capacity for customers, provide safety enhancements, implement park and ride expansion and improve operational efficiencies. We are requesting $40 million for this project.

BUS PURCHASE

Port Authority is also requesting $20 million of section 5309 bus/bus facility funds in the fiscal year 2001 transportation appropriations to be used toward the procurement of approximately 80 buses. The new buses will replace buses which have completed their useful service lives and are eligible for retirement by virtue of age or mileage standards. The buses will be used in Port Authority's overall route network, which serves 260,000 riders each day, or about 76 million annually.

It is our fervent desire that your subcommittee will continue increasing the overall level of investment in transportation infrastructure, which is of national importance. as a result of your work, this subcommittee has enabled public transportation systems in our great cities, suburban communities, and rural areas to be rejuvenated. Your work has also helped create an interstate highway system and an airport network that is the envy of the world. It is imperative that we sustain this momentum and that all levels of government continue to develop our transit and surface transportation networks in order to keep American mobile and growing.

Finally, I want to thank you Mr. Chairman for your personal leadership and all of the subcommittee members for their past support and commitment to surface transportation programs, particularly for those that affect public transportation.

I look forward to an active and ongoing dialogue with the subcommittee and all of its members in the coming years. I would be pleased to submit any additional information at this time as would be useful to the subcommittee. Thank you.

PREPARED STATEMENT OF THE REGIONAL TRANSIT AUTHORITY

Thank you for the opportunity to provide this statement to the subcommittee on behalf of the Regional Transit Authority (RTA) of New Orleans and Jefferson Parish.

Before proceeding, the Regional Transit Authority extends its sincerest appreciation to the members of this subcommittee for the support demonstrated towards our

requests for the last fiscal year. As you may recall, upon enactment, the fiscal year 2000 transportation appropriations bill included $3,300,000 for RTA's bus lease maintenance program from Louisiana's $5,000,000 statewide bus appropriation, and $1 million for the canal streetcar project. We are very grateful to the subcommittee for its role in providing that critical funding.

In summary, for fiscal year 2001, the Regional Transit Authority is requesting Federal funding for the following projects:

—$76,000,000 for the canal streetcar project
—$40,000,000 for RTA's lease/maintenance program
—$10,000,000 for the desire corridor project

CANAL STREETCAR PROJECT

The canal street corridor project will restore light rail transit service to the city's most important transit corridor. For fiscal year 2001, the Regional Transit Authority is requesting up to $76,000,000 of FTA section 5309 new start rail funding to construct the project.

The project completed the major investment analysis phase in the fall of 1995 and the Environmental Impact Statement (EIS) was completed in August of 1997. The FTA issued the favorable "record of decision" on August 28, 1997. currently, the project is undergoing final design. The prototype streetcar has been completed and is operating regularly as part of its testing. Construction is expected to begin in 2001.

The total cost of the canal streetcar project, including the proposed city park spur, is approximately $156,600,000. To date, Congress has appropriated $55.5 million towards the project.

The Regional Transit Authority recently took two major steps towards ensuring the fiscal viability of the project as it strives to obtain a full funding grant agreement. Unfortunately, both actions occurred after the update submittal to the FTA to affect the project's current "not recommended" status per the annual report on new starts for fiscal year 2001 issued earlier this month.

While the project continues to enjoy positive ratings under the project justification criteria, it suffers under the financial rating criteria. To that end, as well as to ensure the financial stability of both the project and the RTA system, the RTA enacted a fare increase and obtained an additional source of sales tax revenues.

The fare increase was implemented in the fall of 1999 when the base fare rose from $1.00 to $1.25. The expected decrease in ridership was not as severe as projected while the revenue increases has done much to reverse the negative operating budget outlook the RTA faced previously.

The additional sales tax will be the result of a settlement between the RTA, the local hotel/motel industry, and tourism officials to share in the proceeds of a previously unlevied sales tax on hotel and motel rooms in New Orleans. The RTA will receive 60 percent of the collections while the other two parties will split the remaining amount. The new levy, which is expected to begin on May 1st, is projected to generate an additional $6–$7 million per year for the RTA. Those proceeds will be dedicated for both the canal streetcar and desire corridor new start projects.

The canal street corridor connects with 70 percent of the Regional Transit Authority's 59 transit lines and seven suburban routes. In the future, the route could connect with Amtrak and the local Greyhound bus terminal at the New Orleans union passenger terminal.

The streetcar's track will be placed primarily within existing medians, which will allow the RTA to remove buses from the currently congested traffic stream. The EIS analysis predicts 20 percent growth of ridership over the 18,000 per day currently utilizing the bus service within the corridor.

in a major effort to reduce the overall cost and scope of the project, the RTA has implemented two strategies, both during construction and operation:

First, the canal streetcar track will match the recently regauged track of the riverfront streetcar and the historic St. Charles streetcar line. The common gauge will allow the RTA to use the existing Carrollton streetcar facility of the St. Charles streetcar as a heavy duty maintenance facility for all three lines as well as the proposed desire corridor line. Thus, the RTA will avoid the cost of duplicating a similar facility. However, a separate storage and inspection facility for daily maintenance and cleaning of the streetcars will be built due to capacity constraints at Carrollton.

The second part of the strategy will be to assemble the streetcars in New Orleans by the technicians and craftsmen at the RTA's Carrollton facility whom recently built seven streetcars for the revamped riverfront streetcar line and overhauled the entire 36 car St. Charles fleet. This facility and its workers are uniquely suited to construct the canal streetcars competently and economically. The RTA will be able

to save approximately $400,000–$600,000 per vehicle by taking this approach. Estimates are that for an outside firm to bid on the streetcars, which are a one-of-a-kind design, it would cost the taxpayer anywhere from $1.6 to $1.8 per vehicle. RTA approximates its cost at $1 million to $1.2 million.

the streetcars will be basically replicas of the venerable, and no longer available, Perley Thomas type that now traverses the St. Charles line. However, the canal streetcars will be ADA accessible and air conditioned.

LEASE/MAINTENANCE PROGRAM

As its highest priority request under the FTA bus and bus facility program, the Regional Transit Authority (RTA), is seeking $40,000,000 representing five years of payments under its innovative lease/maintenance program approved by the Federal Transit Administration.

The RTA has entered into a lease and maintenance agreement with a commercial leasing company for the lease and maintenance of 175 new buses. The agreement will allow the RTA to benefit from the Federal regulations that permits the treatment of maintenance costs under a lease as an eligible capital expense. Penske truck leasing, through the RTA's RFP selection process, is the lessor of the buses as well as being responsible for the maintenance of the buses. The financing will be by ABN–AMRO.

With 446 vehicles, the RTA operates the largest system in Louisiana by providing service to nearly 180,000 riders per day in a city that is 20 percent transit dependent. The new buses has significantly reduced the operating expenses of the RTA and has enhanced its ability to provide dependable service.

This request will once again be a part of the fiscal year 2001 Louisiana statewide request for FTA bus program funding. That effort is led by RTA staff and is coordinated through the Louisiana Public Transit Association. We hope our cooperative attempt will yield additional support once more to benefit the state's other transit systems as well as the RTA.

DESIRE CORRIDOR PROJECT

The RTA is requesting $10,000,000 of FTA section 5309 new start funds for the corridor once occupied by the fabled streetcar named desire. The funding will allow the project to proceed to final design. The major investment study (MIS) was completed in May of 1999. The RTA is currently seeking approval from the FTA to proceed to preliminary engineering and the environmental impact phase. To date, Congress has appropriated $6 million of FTA new start funding to the project.

The completion of the major investment study (MIS) with extensive public input resulted in the selection of the former St. Claude streetcar route as the light rail alternative. Utilizing N. Rampart Street and St. Claude Avenue, the four-mile (8 miles round-trip) would travel through the historic New Orleans neighborhoods of Bywater, Fauborg Marigny and the Vieux Carre (the French Quarter).

the project also includes a number of transportation systems management (TSM) improvements including bus route changes, smaller buses, intelligent transportation system (ITS) innovations, and bus turn lanes.

The proposed streetcar line will allow the RTA to consolidate a number of bus routes away from the historically and structurally sensitive French Quarter. The line is expected to improve the overall efficiency of the RTA system by allowing for higher operating speeds and shorter travel time for buses now forced to use congested French Quarter streets. The streetcar will provide direct service to the French Quarter, Faubourg Marigny and Bywater neighborhoods that are otherwise inaccessible to regular transit service. In addition, the line will serve two major defense facilities; the U.S. Coast Guard support center and the Navy's F. Edward Hebert defense complex.

Thank you for your time and consideration with these requests on behalf of the regional transit authority.

PREPARED STATEMENT OF THE LOUISIANA PUBLIC TRANSIT ASSOCIATION

Thank you for the opportunity to submit a statement to the house subcommittee on transportation appropriations on behalf of the 120 transit providers represented by the Louisiana Public Transit Association. Due to the difficulty in obtaining section 5309 funding for bus and bus related facilities through the Federal Transit Administration (FTA) application process, the LPTA presents its statement to this committee in an effort to meet the state's long-standing transit needs.

Before explaining our project requests, the LPTA wishes to thank the subcommittee for its role in appropriating $5,000,000 towards the $35.7 million fiscal year 2000 request. That funding will go a long way in helping the Louisiana Transit providers.

The total Louisiana request for fiscal year 2001 under FTA section 5309 bus and bus related funding is $65,551,000. The request is for 14 projects of varying size and cost from nine transit agencies. Briefly, those requests are for:

The City of Alexandria, Alexandria Transit (ATRANS), is requesting $1,030,000 for replacement vehicles. ATRANS needs to replace four thirty foot buses and three vans for its ADA paratransit service. The replacement vehicles will include surveillance cameras, two-way radios, and fareboxes. The vehicles being replaced will soon exceed their useful life.

The City of Baton Rouge, Capitol Transportation Corporation (CTC), is requesting a total of $1,200,000 for two projects important to the capital region.

Funding of $1,000,000 is being requested to begin the replacement of seven buses and three vans that have exceeded their useful life. CTC will have an additional ten buses that will need to be replaced after 2000. In addition, because of recent and well-received upgrades to the transit service in the Baton Rouge area, CTC will also have to increase its paratransit fleet to meet demand and ADA requirements.

CTC is also requesting $200,000 of funding to replace radio equipment throughout the CTC system including base stations, bus radios, van radios and supervisors' radios. The replacements are necessary due to the recent purchase of a new regional 800 mhz system. The replacement equipment will permit the coordination of communications between police, transit dispatch, emergency medical service, and the regional transportation management center.

Jefferson Parish, which funds and oversees two private transit systems on each side of the Mississippi River, Louisiana transit on the east and westside transit on the west, is seeking funding of $500,000 to begin the preliminary planning of an eastbank transit terminal. The proposed site is located on airline drive near the intersection of Causeway Boulevard, an area near several major transfer points. The terminal would greatly improve the efficiency of the eastbank system by providing easy access to transfer among three routes. The facility would provide for better security, conveniences, and connections for riders utilizing the system.

The City of Lafayette, through the City of Lafayette Transit System (COLTS) is seeking the remaining $6,200,000 of Federal funds needed to reconstruct and reconfigure a site currently operating as a postal facility adjacent to an Amtrak station. The Lafayette multimodal transportation center will serve as the terminal for the COLTS system, a Greyhound station, and as an enhanced Amtrak stop for the sunset limited. The postal service will also continue to use a portion of the site. The city will house its traffic and transportation department's development, transit, parking and planning divisions at the center. The $10,500,000 project already has been designated with a positive environmental impact statement and is in the design development phase. Construction is scheduled to begin in late 2000.

COLTS is also seeking $1,600,000 to replace eight transit buses, 25 percent of the COLTS fleet, that have exceeded their useful life of twelve years and are not accessible under ADA. By the end of fiscal year 2001, over seventy-five percent of the transit fleet will have reached the end of their useful life.

The Louisiana Department of Transportation and Development, specifically the Office of Public Transportation, is in need of another $2,300,000 of Federal funding to allow the replacement of 78 vans for both rural and specialized transit providers across Louisiana. All the vans to be replaced are inaccessible under ADA, exceed the useful life standard of 5 years by 2–4 years, and are far beyond the 100,000 miles cited as the mileage standard. Obviously, safety and dependability problems with vehicles of this size is a growing concern for the rural, elderly and disabled community across Louisiana. Additional demands for vans are expected to meet the needs of welfare-to-work.

In order to meet the increasing demand for transit service in Louisiana's rural areas, the LPTA is requesting another $1,200,000 of section 5309 funding for expansion of the state's rural transit systems by 35 vehicles. Currently, many of the state's rural parishes do not have rural transit providers due to the LA DOTD's backlog of replacement needs for existing operators. In addition, many current rural operators need to expand to meet the demands of welfare-to-work, jobs access, and other basic transportation needs as the population expands and ages in those rural areas. The program would be administered through the existing rural transit program of the Louisiana Department of Transportation and Development.

The City of Monroe, through the Monroe Transit System (MTS), is requesting funding to renovate, expand, and update their aging maintenance facility in the amount of $2,000,000 for the $2,500,000 project. MTS will renovate the 15 year-old

facility by adding bays to be dedicated to conduct cost saving preventative maintenance checks and to equip the facility with modern and safer equipment. In addition, MTS is planning to reconfigure the facility to allow for drive-through capability and space for added inventory. The facility is MTS only maintenance garage and the work proposed will make it much more efficient and economical to operate.

In addition, MTS is seeking $1,700,000 to replace seven forty-foot transit buses that have exceeded their useful life. Currently, the average age of the MTS fleet is 10 years.

The City of New Orleans, through the Regional Transit Authority (RTA), is requesting $40,000,000, which represents five years of payments under its innovative lease/maintenance program approved by the Federal Transit Administration. This program allows the RTA to enter into a lease and maintenance agreement with a commercial leasing company for the lease and maintenance of 175 new buses. The agreement permits the RTA to benefit from the FTA regulations that allow for the treatment of maintenance costs under a lease as an eligible capital expense. Penske truck leasing, through the RTA's RFP selection process, was selected as the lessor of the buses as well as provide for the maintenance of the buses. The financing will be by ABN–AMRO.

With 447 vehicles, the RTA operates the largest system in Louisiana by providing service to nearly 180,000 riders per day in a city that is 20 percent transit dependent. The buses leased will significantly reduce the operating expenses of the RTA and enhance its ability to provide dependable service.

Finally, as you are probably aware, the RTA has pending two new start rail requests, one for the Canal Street corridor project (undergoing final design) for $76,000,000 and another $10,000,000 for the desire corridor project. The RTA will provide detail of those projects in a separate statement.

The next request is on behalf of the City of Shreveport and its Sportran Transit System for funding of $7,680,000 to replace thirty-four transit buses. The vehicles have exceeded their useful life of twelve years and are not accessible under ADA requirements.

The last request is on behalf of St. Tammany Parish that is requesting $300,000 for a park and ride facility to be located in Mandeville, located within western portion of the parish. The park & ride facility is proposed for a half-acre site in the vicinity of Gerard Street. It will be near the Lake Pontchartrain causeway and is expected to draw local residents which should help limit the expansive growth of traffic on the causeway.

The proposed project will provide parking for up to 50 automobiles including the required disabled spaces. There will be a bus pad capable of handling a fully loaded 40-foot bus with proper ingress and egress to the site. Amenities to the site will include lighting and landscaping consistent with the surrounding natural environment. The project will renovate an existing building to provide a transit terminal containing telephones, water fountains and benches.

St. Tammany Parish is directly north and northeast of the City of New Orleans across Lake Pontchartrain. It is the fastest growing area of the region. the park-and-ride will reduce traffic impacts associated with commuter traffic in St. Tammany Parish and help ameliorate air quality concerns for the New Orleans region now designated as an air quality maintenance area. This project will be the second park & ride facility for the residents of St. Tammany Parish.

Thank you for your time and consideration with these requests on behalf of Louisiana's Transit Systems.

For your reference, attached you will find a summary of the fiscal year 2001 Louisiana request.

NEW START RAIL, 49 U.S.C. Section 5309 (Formerly Section 3

	Appropriations
New Orleans Canal Street Corridor Project (Construction)	$76,000,000
New Orleans Desire Corridor Project (Final Design)	10,000,000

BUS AND BUS RELATED FACILITIES, 49 U.S.C. SECTION 5309 (FORMERLY SECTION 3

	Federal [1]	Local	Total
Alexandria:			
Four Thirty-foot Buses	$880,000	220,000	1,100,000
Three Vans	150,000	37,500	187,500

BUS AND BUS RELATED FACILITIES, 49 U.S.C. SECTION 5309 (FORMERLY SECTION 3—Continued

	Federal [1]	Local	Total
Baton Rouge:			
Buses and vans	1,000,000	250,000	1,250,000
Communications Equipment	200,000	50,000	250,000
Jefferson Parish: Eastbank Terminal (preliminary design)	500,000	125,000	625,000
Lafayette:			
Multimodal Transportation Center	6,200,000	1,550,000	7,750,000
Eight Forty-foot Buses	1,600,000	400,000	2,000,000
Louisiana Department of Transportation & Development, Public Transportation:			
Replace 78 vans (Rural & E&H)	2,300,000	575,000	2,875,000
Rural Transit Expansion (vans)	1,200,000	300,000	1,500,000
Monroe:			
Renovate maintenance facility	2,000,000	500,000	2,500,000
Replace seven Forty-foot buses	1,500,000	375,000	1,875,000
New Orleans: Lease Maintenance Program (5 years)	40,000,000	10,000,000	50,000,000
Shreveport: Replace 34 buses	7,680,000	1,920,000	9,600,000
St. Tammany Parish: Mandeville Park and Ride Facility	300,000	75,000	375,000
Total	65,551,000	16,377,500	81,887,500

[1] Amounts to be prorated should full funding not be realized.

FEDERAL AVIATION ADMINISTRATION

Prepared Statement of Iowa Statement University, Institute for Physical Research and Technology

INTRODUCTION

The U.S. air transportation system is the best and the safest in the world. It plays a key role in the U.S. economy carrying over 614 million passengers in 1998 alone. That number is expected to climb to 890 million passengers by the year 2008, nearly doubling in two decades the 1998 number when it carried over 450 million. These increases will be met by the continued operation of existing aircraft as well as the introduction of new aircraft into the commercial fleet. The U.S. fleet is expected to grow from 5,200 aircraft in 1998 to 7,200 by the year 2008, a 38 percent increase in only 10 years. The diligence that the Federal Aviation Administration and the aviation industry employed in the 20th century to ensure public safety must be ever-increasing to ensure continued performance as we enter the next century. The aerospace industry also plays a critical role in the U.S. economy, employing almost 5 percent of the manufacturing work force in the U.S.. Congress is urged to continue their support to address the critical safety and economic issues associated with this vital industry through funding for the Aviation Safety budget of the Federal Aviation Administration. The Airworthiness Assurance Center of Excellence (AACE), established by the FAA in 1997, offers a unique opportunity for the government to work with industry on precompetitive aviation safety research to their mutual benefit and the benefit of the flying public. The AACE team is comprised of the best talents the U.S. has to offer in technologies critical to the safe design and operation of aircraft. This document provides details of the national importance and the contributions possible through the Airworthiness Assurance Center of Excellence.

BACKGROUND

Several incidents in the last fifteen years have focussed the attention of the aviation community on the needs related to safety, and in some instances provided direction to federally funded research programs managed by the FAA William J. Hughes Technical Center's Aviation Safety Division. A chronology of those events is provided here:

—In 1988, the Aloha incident drew the attention of the industry to issues related to the structural integrity of aircraft systems. The Aviation Safety Act of 1988 directed the FAA to better predict the effects of design, maintenance, testing, wear, and fatigue in the life of an aircraft; to develop methods for improving

aircraft maintenance technology and practices, including nondestructive inspection; and to expand general long-range research activities applicable to aviation systems.

—In 1990, the FAA Center for Aviation Systems Reliability (CASR) was established at Iowa State University to support the FAA's research needs in the research and development of inspection technologies. In 1991, the Airworthiness Assurance Nondestructive Inspection Validation Center at Sandia National Labs (AANC) was established as a sister program that supports the validation and transfer of inspection technologies. The resources of CASR and AANC provide the FAA with the full spectrum of research capabilities for inspection technology, spanning from basic research through applied research, which has been fully validated in realistic settings.

—In 1989, a United Airlines DC–10 crashed in Sioux City, Iowa, as it tried to land following a major in-flight malfunction. The cause of the incident was traced back to the presence of a melt-related defect known as "hard alpha". In response to issues identified in the wake of this incident, the Engine Titanium Consortium at Iowa State University was established in 1993 to address the inspection of critical jet engine components.

—In 1996, the White House Commission on Aviation Security and Safety undertook an intensive investigation into improving aviation safety. Several incidents beyond those noted above, including the TWA 800 event in Long Island, the ValuJet incident in Miami, and the Delta incident in Pensacola, precipitated the establishment of the White House Commission. After extensive review, the Commission recommended that a concentrated effort be put in place to reduce accidents five-fold over the next decade. Reductions in the overall accident rate are needed in light of the major increases in air travel and in order to maintain the public's confidence in the air transportation system.

The FAA has focussed its resources on the accident prevention steps that hold the most potential. In April 1998, the FAA Administrator and the Vice President announced the Safer Skies Initiative, which will use the latest technology to help analyze U.S. and global data to find the root causes of accidents and determine the best actions to break the chain of events that lead to accidents. Safer Skies will use partnerships between the FAA and the aviation industry to determine the highest priority issues and develop programs to address those issues. Already in existence, the Airworthiness Assurance Center of Excellence is a model for such partnerships, and it is expected to be a major contributor to achieving the goals of this program.

RESPONSE TO A NATIONAL NEED

The FAA, the airline operators and the aviation systems manufacturers share the responsibility for aviation safety. Each plays a unique and complementary role in the lifecycle of commercial aviation, starting with design, manufacture and certification of aviation products followed by the operation and maintenance of the commercial fleet. In 1997, the FAA established the Airworthiness Assurance Center of Excellence (AACE) to address research, education, and technology transfer and utilization in the area of airworthiness assurance. Specifically, the FAA uses this center to ensure that the most current technology is available to address the safety needs of aviation. AACE, comprised of nearly 100 university and industry partners, offers the full range of technologies needed to address safety issues. Partnerships are already in place, and functioning well. These enable business competitors to put aside competition and to work together to address safety issues to the common benefit of the industry and the flying public. AACE offers a unique opportunity for the government to work with industry and leading research universities to accomplish the following objectives:

—To promote and facilitate research in industrially relevant subjects that will improve aviation safety

—To facilitate utilization of appropriate research results and transfer of technology into aerospace applications

—To develop education and training tools for improving aviation safety including participation of students in industrially relevant research

AACE CAPABILITIES SUPPORT SAFETY NEEDS

Through the concentrated efforts of the industry and the government, the overall commercial aviation safety record has seen improvement from 0.121 fatalities per 100,000 flights in 1989 to 0.036 fatalities per 100,0000 flights in 1997. Continued diligence is needed to further improve the safety record and accomplish the goal of a five-fold improvement established by the White House Commission. New technologies are being introduced in the manufacture of commercial aircraft with new

materials, new processes, and new inspections finding their way into structural applications. As the aircraft and their systems age, new challenges are evident in the maintenance, inspection and repair of the commercial fleet. Comprehensive capabilities are needed to address the wide range of technology needs to assure continued safety improvements. AACE has successfully established a team of aviation experts that includes the following expertise:

—Aircraft standards and specifications
—Inspection technology—airframe, propulsion, nonstructural systems, and components
—Reliability and POD methodologies
—Maintenance and repair technology
—Composites development, repair, and certification
—Materials properties, characterization and computational modeling
—Flight loads analysis
—Fuels analysis
—Crashworthiness of aircraft structures
—Personal protection systems
—Propulsion materials and design
—Structural integrity and fracture mechanics

ESTABLISHMENT OF WORLD-RENOWNED SAFETY TEAM

AACE is comprised of eight core universities, Sandia National Laboratories and over 100 other university and industry affiliates. The nine core members, which include Iowa State, Ohio State, Northwestern, Wichita State, UCLA, Arizona State, University of Dayton, University of Maryland, and Sandia National Laboratories, provide expertise in all the major research areas necessary to address FAA aircraft safety needs. Results from the AACE program are already impacting the aerospace industry and the safety of its operations. Major accomplishments of AACE include:

Inspection development.—Tasks are under way at ISU, Northwestern University, Ohio State University, and Wayne State University through the CASR program. University researchers cooperate with engineers at Sandia National Laboratories to transfer the results into industrial use as part of the AANC. Efforts are under way to transfer thermal wave, ultrasonic, and eddy current techniques into use at airline maintenance and overhaul facilities.

—New approach to acoustic testing developed by ISU researchers is used for finding delaminations in composite structures. The approach is being developed and tested with Northwest Airlines and Boeing with technical support from Sandia National Labs. Beta site tests are under way with American Airlines, Delta Airlines, and United Airlines; ongoing studies are in place with the Iowa Army National Guard; and commercialization discussions have begun.
—Software tool for optimized x-ray inspection was developed at ISU and is currently being used by Boeing, Pratt & Whitney, Honeywell, General Electric, Allison/Rolls Royce, and Howmet for the evaluation and design of critical aerospace inspections. The tool has been used to determine the effect of inspection angle on the ability to detect cracks in structural elements of airframes, to determine the detection sensitivity for detrimental particles in jet engine components, and many other safety-critical inspections.
—Crack detection for aging aircraft has been the focus of research at Northwestern University. An approach to detect cracking in hidden layers has been implemented by Northwest Airlines, Delta Airlines and USAirways for inspection of the DC–9. This one inspection has saved the industry over $1M and led to the successful detection of cracking and corrosion.

Propulsion inspection research.—The Engine Titanium Consortium Phase II program was established in 1999. The ETC includes research efforts of ISU in partnership with the three major U.S. engine manufacturers, General Electric, Honeywell, and Pratt & Whitney. Efforts are under way to improve the detectability of critical flaws in the titanium and nickel alloys that are commonly used in jet engines. Tools for use in manufacture and operation of jet engines are under development along with quantitative methodologies to assess the reliability of the inspection processes.

—Improved inspection of titanium billet was the focus of the ETC Phase I production efforts. The multizone system, optimized by the ETC team, has been implemented at three inspection labs, used to inspect millions of pounds of billet, and has prevented hard alpha defects from entering jet engine parts
—Inservice inspection of critical jet components can now be accomplished more rapidly and with improved sensitivity using tools developed by ETC. The Portable Scanner is available as a commercial tool and is being used in commercial

and military applications. Over 15 units have been sold for use in ensuring safe operation of critical jet engine disks.

—Quantitative assessment of ultrasonic inspection is now possible using methodologies developed by ISU and the partners of ETC. Statistical approaches to assess the effectiveness of an inspection enable the industry to make engineering decisions about the method and frequency of inspection.

Jet engine materials improvements.—The Special Metals Processing Consortium, headed by Sandia National Laboratories, working with the major U.S. suppliers of jet engine alloys and the engine manufacturers, develops improves melting processes for titanium and nickel alloys. Their efforts are directed at reducing the occurrence of melt related defects such as hard alpha, the defect that led to the Sioux City crash.

Fuels safety.—Work is under way at Stanford Research Institute, University of Dayton, and Arizona State University to understand the source, nature, and potential hazards of copper and silver sulfide deposits in aviation fuels. Results will have implications for understanding the cause of the TWA 800 incident.

Materials research.—Today in the aviation industry, the use of composite structures is more widespread. To fully realize the weight-saving potential of composites, one must first understand the damage tolerance of such structures. This understanding is essential first in the design process in order to develop structures that are more efficient and second, in serviceability to reduce the extent and frequency of repair. Work is under way at Wichita State University, University of Maryland, Northrop Grumman, and UCLA to understand the damage mechanisms and provide data to the FAA in evaluating the safety of composite materials.

AEROSPACE IS A KEY ELEMENT OF U.S. COMPETITIVENESS

The aerospace industry employed 893,000 people ($32.9M payroll) in 1998 down from a high of 1,314,000 ($34.2M payroll) in 1989 which represents 4.8 percent and 6.8 percent of the overall manufacturing employment respectively. Aircarriers employed another 621,000 people in 1998. In addition to its role as a major employer, the aerospace industry also accounted for 9.4 percent of U.S. exports in 1998 with nearly $35 billion exported through aircraft and engines sales. Given the economic importance, continued research and development activities for the overall safety of the industry are needed. AACE is uniquely positioned to support the research efforts that enhance economic competitiveness. The leading aviation research universities in the country are partnered with national laboratories such as Sandia National Laboratories and the Ames Laboratory to provide research solutions to industry defined problems. This is the real advantage—the industrial users and partners help define the needs and the preeminent research organizations in the world are partnering to work toward their shared results. Industry partners have defined the following goals for AACE research:

—Reduce failures by order of magnitude

—Improve efficiency of operations and support to reduce cost

—Reduce certification time and costs These goals were arrived at through the efforts of aircraft and engine OEMs, major U.S. airlines, and aviation systems manufacturers, working with Iowa State University, Northwestern University, Wichita State University, Ohio State University, and Sandia National Labs.

OPPORTUNITIES BUILT UPON EXPERIENCE

Economic and competitive forces are changing the way aircraft are developed, certified, and operated. These same forces impact the operational life span of the aircraft. Factors affecting the future of aviation include shorter design and certification cycle times, a shrinking (and retiring) workforce, and increased outsourcing and use of third party support. Preeminent FAA safety goals must be reconciled with industry business needs to fully address the challenges ahead for the aviation industry. The Airworthiness Assurance Center of Excellence, established in 1997, combined the talents of the Center for Aviation Systems Reliability at Iowa State University and the Airworthiness Assurance NDI Validation Center at Sandia National Labs with the capabilities of other major universities and industry partners. CASR and AANC have considerable experience in the development, validation, and implementation of inspection technologies. Building on that experience base, AACE is uniquely positioned to address the full range of safety and economic research needs of the government and the industry. Opportunities to apply the best available technology to the highest priority needs are in place.

Congress is strongly urged to continue their support for these critical safety and economic issues through funding for the Aviation Safety budget of the FAA. The Airworthiness Assurance Center of Excellence offers a unique opportunity for the gov-

ernment to work with industry on precompetitive aviation safety research to their mutual benefit and the benefit of the flying public.

—AACE is in place, and it is working.
—It is doing exactly what it was designed to do, and the need it serves is growing.
—It is providing demonstrable benefit to the aviation industry.
—It is a model of government, industry, and academic collaboration to address the overriding safety concerns of the public.
—It is a vehicle enabling the best minds to work on major concerns, and to do so while distanced from the competitive forces of the normal workplace.
—It should be strongly supported as it continues the successful performance of the work it was asked to do.

PREPARED STATEMENT OF THE FLIGHTSAFETY INTERNATIONAL

This is in support of the justification by the City of Vero Beach, Florida for $5.2 million in funding from the FAA Facilities and Equipment fiscal year 2001 appropriations account to relocate and replace the Air Traffic Control Tower at the Vero Beach Municipal Airport.

URGENT SAFETY ISSUE

Air traffic controllers at the existing tower, built in 1973, have their visibility limited by obstructions for about 30 percent of the nearly 240,000 annual operations at the airport. For certain areas of the airport they have no visibility at all of aircraft ground movements.

Since 1973, the City has lengthened the main runway, improved the secondary runway, added a third runway, and developed the central and west areas of the airport. Vero Beach Airport traffic is projected to grow to 270,000 operations annually in the next few years.

At Vero Beach, FlightSafety International operates 90 aircraft that fly about 90,000 hours annually. Roughly 25 percent of the pilots trained at Vero Beach, or about 1,000 pilots annually, are from foreign-speaking countries worldwide who are being trained for international airlines and international general aviation. This situation demands the utmost in airport traffic control.

The existing tower is located just to the north of the main east-west runway. Landing aircraft approaching this runway from either direction after sunrise and before sunset are often difficult to see, particularly in hazy conditions. Furthermore inbound traffic from the south entering the landing pattern for either runway are equally difficult to see for the same reason. (See attached airport diagram.) The proposed location of the new tower, to the south of the east-west runway, will alleviate this potentially dangerous situation.

The present tower has no radar, and control by tower personnel of visual or instrument traffic can be daunting. With no approach control, the tower cannot release aircraft for takeoff or clear the instrument traffic for landing until visual contact is established.

The possibility of a mid-air collision is a very real danger despite the controllers' continuing valiant efforts.

FlightSafety International, a U.S.-owned company, operates over 40 Learning Centers around the world and is the largest provider of flight and simulator training in the world. The FlightSafety Academy at Vero Beach is the only location operated by the Company that provides ab initio pilot training.

RECOMMENDATION

We urge the Subcommittee to support the $5.2 million in fiscal year 2001 funding from the FAA Facilities and Equipment Account for the construction of the Air Traffic Control Tower replacement at the Vero Beach Municipal Airport.

PREPARED STATEMENT OF THE AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES AND AIRPORTS COUNCIL INTERNATIONAL—NORTH AMERICA

Mr. Chairman, members of the subcommittee, we are pleased to offer this testimony regarding fiscal year 2001 appropriations for the Airport Improvement Program (AIP) and other appropriations-related issues on behalf of the American Association of Airport Executives (AAAE) and Airports Council International—North America (ACI–NA). AAAE is the world's largest professional organization representing the men and women who manage airports; ACI–NA members are the

local, state and regional governing bodies that own and operate commercial service airports in the United States and Canada.

Before looking forward to fiscal year 2001, we want to first offer our sincere appreciation to the subcommittee for its long-standing support of airports and its continued commitment to airport funding. The $1.896 billion AIP obligation limitation for fiscal year 2000, which is now being released with enactment of recently passed reauthorization legislation, will undoubtedly make a big difference in helping tackle much needed safety, security, capacity and noise mitigation projects at airports nationwide.

These investments are critical to keeping pace with the significant growth in aviation activity, which is projected to explode from approximately 650 million passengers annually to more than one billion within a decade. The subcommittee deserves a great deal of credit for working to address these increasing demands, a task not easily accomplished given the inadequacy of the Administration's recent budget requests for AIP and in light of the subcommittee's obligation to other programs under its jurisdiction.

Despite the subcommittee's dedication to increasing AIP funding levels, much more is required from the federal government. According to the General Accounting Office, there is an annual $3 billion gap between existing airport needs and available capital for investment. Continued under-investment of this magnitude is beginning to take a toll on the aviation system as evidenced by the significant delays experienced last summer and at numerous airports throughout the year.

In reality, those delays are only one symptom of a much deeper problem that threatens to cripple the nation's air transportation system, a system that Americans rely on to create economic growth locally and to compete internationally. In 1997, the National Civil Aviation Review Commission warned Congress that without prompt action, the United States' aviation system would hit gridlock shortly after the turn of the century, jeopardizing safety, harming the efficiency and growth of the domestic economy, and hurting the nation's position in the global marketplace.

Congress has taken action to secure additional resources for aviation as part of FAA reauthorization legislation. That bill, which was passed overwhelmingly by both Houses of Congress in March, significantly increases investment in FAA capital accounts, particularly AIP. We believe this increase in AIP funding is absolutely justified and in the best long-term interest of airports, the travelling public and the nation.

We commend the members of both the subcommittee and the full committee for the critical role you played in shaping the final compromise on the FAA reauthorization bill and for bringing the conference committee to its successful conclusion. In the end, the bill offered a fair and reasonable approach that provides desperately needed capital while ensuring that those funds are wisely spent. Among other things, the legislation provides important management changes at the FAA and maintains the critical role of the subcommittee and the full committee in maintaining oversight of the Agency.

Given the overwhelming needs of airports nationwide and with important safeguards in place, we believe it imperative that the subcommittee fund AIP at not less than the fully authorized $3.2 billion level in fiscal year 2001. The increase in AIP to $3.2 billion combined with a modest increase in the federal cap on locally imposed Passenger Facility Charges (PFCs) will help narrow the current airport funding gap and enhance the safety, efficiency and capacity of the nation's aviation system.

In addition, we urge you to carefully consider provisions in the reauthorization legislation that allow the subcommittee to shift funds from the facilities and equipment account to AIP, when appropriate. Although Administrator Garvey deserves high marks for gaining a better grip on the Agency's modernization program, it is clear that much remains to be done to ensure that scarce federal resources are wisely spent in this area. Given the "bang for the buck" that accompanies AIP expenditures, we believe that there may be instances when funds will be better spent for airport improvements.

We are aware of the concerns expressed by some about the strain the newly enacted FAA reauthorization bill may place on the FAA operations account and other federal transportation programs. While we are sympathetic to those concerns, we oppose shifting funding from AIP to other areas of the FAA's budget.

Unfortunately, efforts along those lines have already begun with the current year's funding of the administration of the FAA Airports Office from AIP and the President's proposal to do so again in fiscal year 2001 along with $50 million from AIP for funding Essential Air Service (EAS). While we support full funding of both the Airports Office and EAS, we are adamantly opposed to raiding AIP for purposes for which the program was not intended to support.

The reauthorization bill acknowledges the importance of the FAA operations account in funding these types of programs and fulfilling the FAA's critical safety mission. The bill calls for funding the operations account at the President's requested level, to be paid for in part from the general fund, as has been the case historically. Since all Americans benefit from the aviation system, we believe a continued general fund contribution is appropriate and necessary.

We have trouble accepting the premise that FAA operations will somehow become abandoned with the enactment of the reauthorization bill. The operations account has grown significantly from $3.8 billion in 1990 to nearly $6 billion in fiscal year 2000, with most of the increases coming at the expense of the capital accounts, which have not enjoyed similar growth rates. The reauthorization bill simply stops the constant chipping away at the capital accounts in recognition of their importance to meeting future demands.

Further, we agree with the Department of Transportation Inspector General that the passage of the reauthorization bill should move the Agency forward in containing operations costs, developing a cost accounting system and developing a strategic business plan. Those efforts combined with the management reforms contained in the bill should produce increased efficiencies and cost savings in FAA operations.

One specific area for air traffic control cost savings the Inspector General has touched on is the FAA Contract Tower Program. In addition to providing approximately $30 million in ATC savings, the program improves ATC safety, enhances regional airline service opportunities and increases economic productivity in smaller communities across the country. We appreciate the subcommittee's past support of this program, which continues to receive high marks from the IG.

We urge the subcommittee to continue its support of full funding ($55.3 million) for the Contract Tower Program as requested in the President's budget request. We also ask for an additional $5 million to be used exclusively for the continuation of the Contract Tower Cost-Sharing Program supported by the subcommittee last year.

As we approach the delay-prone summer season it is important to recall the role of airports in supplying the much-needed capital investment in infrastructure to help address the serious and worsening problem of delay. At the same time, there is significant investment necessary by FAA in the new technologies needed to modernize the National Airspace System.

Although FAA has acknowledged difficulties fielding advanced technologies, it is enjoying the support of the industry in successful programs such as Free Flight Phase 1. Nevertheless, a reliable and adequate funding stream is essential if this success is to be repeated across the entire NAS modernization effort. We urge your support of the follow-on Free Flight Phase 2 projects. We also want to emphasize how important the satellite navigation programs are to our members' ability to increase capacity and safety at their airports.

Despite the recent setbacks in the Wide Area Augmentation System (WAAS), it is an essential tool to providing basic instrument approach procedures at many of our smaller airports with no approaches at all. WAAS will also provide important new safety margins by supplying vertical guidance on the many existing non-precision approaches where controlled flight into terrain has been a continuing threat. Development of WAAS should continue at a funding level commensurate with FAA's current implementation schedule.

The Local Area Augmentation System (LAAS) promises greatly improved navigation precision, which will be of tremendous value to our larger airports. Development of this program is being carried out by innovative Government-Industry Partnerships (GIP's) made possible by the FAA acquisition reform flexibility provided by Congress. In these GIP's, avionics and airframe manufacturers, airlines and airports are jointly developing the basic, Category I precision landing capability. However, in view of the delayed schedule for delivery of a Category I capability by WAAS, it is essential that this effort be accelerated. FAA needs sufficient funding to expedite their role in the development of LAAS: provision of timely standards and certification, development of the Category II/III LAAS system, and procurement of Category II/III LAAS at more than a hundred airports.

A final new technology of importance to airports is Automatic Dependent Surveillance—Broadcast Mode (ADS–B). When coupled with augmented signals from WAAS and LAAS, ADS–B holds significant promise for reducing delay. In last summer's Ohio valley trials, ADS–B demonstrated a real safety benefit by improving situational awareness. It also showed that aircrews were able to safely maintain existing visual separations, resulting in higher airport capacity, rather than adding a several miles margin, as is current practice.

When coupled with high precision signals from LAAS, ADS–B promises to revolutionize airport operations in instrument weather conditions. If controllers and pilots can "see" each other and the landing runway with accuracy of a few feet, as has

been demonstrated with LAAS, then the reduction in capacity at our member's airports during bad weather can be finally be addressed. We believe that independent simultaneous approaches to closely spaced parallel runways permitted by LAAS and ADS–B will solve the bad weather delay problem at some of our nation's most delay-prone airports. When coupled with the ability to "see" traffic on the airport surface (which several of our member airports have already installed in ARFF and operations vehicles), LAAS will provide a valuable tool for preventing the worst kind of runway incursions—a blunder into an oncoming airplane by a large air carrier aircraft.

Another area that merits the support of the subcommittee is the recently created Air Service Development Program, which requires DOT to establish a pilot program to help improve air service to communities not receiving sufficient air service. If fully funded ($20 million in fiscal year 2001), this program will go a long way toward providing communities across the country with valuable assistance that will likely result in improved airline service at more reasonable prices.

This program will be particularly beneficial to many smaller communities that currently suffer from infrequent air service at high prices. These problems are not only an inconvenience for local travelers, they also hamper the ability of these communities to attract and maintain businesses and develop economically. As any local chamber of commerce will tell you, one of the first things any potential business asks when looking at a new site is the availability of reliable and reasonably priced air service.

The Air Service Development Program is designed to give communities or consortia of communities modest funding for worthwhile projects aimed at improving the current situation. Given the severity of the problem in many areas throughout the country and the promise this program offers in enhancing service and lowering prices, it is our sincere hope that you will move forward with full funding.

In the safety area, the newly authorized Wildlife Mitigation program and ATC Modernization pilot program will provide important safety benefits, and they deserve funding from your subcommittee.

Another area of concern for many airports is the recent decision by the FAA to reverse its decades old practice of paying below market rates for FAA facilities located on airport property, choosing instead to push airports to furnish space without cost. While airports are not averse to providing the FAA land for ATC facilities without cost, we feel strongly that the FAA should continue to pay reasonable rental rates for FAA space occupied in airport sponsor-owned buildings.

For smaller airports in particular, the potential loss of rental revenue—even at below market rates—will have a significant impact on their financial situation. This new interpretation is completely at odds with the requirement that airports have a fee and rental structure that make the airport as self-sustaining as possible. On one hand they are told by the FAA to be self-sufficient, and on the other they are told that they can no longer expect the Agency to help foot its own share of the bill, even for FAA facilities located on airport-owned property.

In addition to being a significant financial burden, this situation has become a cost-avoidance issue for the Agency at several locations across the country. Rather than building facilities appropriately located off airport property—such as TRACONS—the Agency is instead choosing to build on the airport, knowing that they can expect to get the land and use of the facility at no cost. Saddling airports with these burdens is unfair and unwise.

In light of the significant financial burden the proposed FAA policy change would impose on airports, it is our hope that the subcommittee will be willing to work with both the Agency and airports to find a solution that best serves both group's long-term economic interests. Continuing the long-standing policy in that regard, rather than applying a new standard that would allow the FAA to require airports to furnish space for buildings without cost appears to be the best option, in our view. Specifically, we ask you to include a general provision in this year's bill forbidding the FAA from expending any funds on the implementation or enforcement of new policy standards in this area.

Finally, we would like to raise our concerns about language included in last year's transportation appropriations legislation that limits FAA's multi-year leasing authority to five years. The shift to the five-year limit from the previous 20-year limit seriously hampers the ability of airports to gain long-term financing for FAA buildings given the short-term commitment. We hope you will revisit this issue and grant multi-year leasing authority up to the previous 20-year level.

There is great opportunity this year to provide America's airports with the resources they need to meet the significant challenges they face in enhancing safety, security, capacity, competition and noise mitigation. This subcommittee has been instrumental in leading us to this point, and we look forward to working with you,

the full committee and the staff to move forward. Thank you for the opportunity to provide this testimony.

PREPARED STATEMENT OF INVISION TECHNOLOGIES, INC.

BACKGROUND

Terrorism is a threat to National Security that requires constant vigilance. Acts of extreme cowardice, such as the downing of Pan Am flight 103, aimed at innocent members of a targeted entity are punctuated by extended periods of seeming inactivity. While public awareness of the specific acts of terrorism fades over time, our national responsibility never fades. With regards to Aviation Security, as one looks closer at the periods of apparent terrorist "inactivity", one finds a much different picture. Specific examples exist of foiled plans far more evil than ever anticipated, technical blunders that created apprehension opportunities, successful test cases that confirmed new vulnerabilities and nothing short of continued preparation by the terrorist enemy. Terrorists continue to advance their capability to murder U.S. citizens in the name of their cause. Therefor, at no time can we let our vigilance fade. We must always push to maintain or improve our readiness to anticipate, prevent and respond to thwart the menace of terrorism.

FUNDING

The tragedy of TWA 800, though thankfully not the apparent result of a terrorist act, served to create a call to arms in aviation security. Shortly after TWA 800, the GAO reported in Aviation Safety and Security on March 5, 1997 that the ". . . FAA is just beginning to purchase explosives detection systems to deploy at U.S. airports, although the Aviation Security Improvement Act of 1990 set an ambitious goal for FAA to have such equipment in place by November 1993." "The (Gore) Commission recommended that the federal government devote at least $100 million annually to meet security capital requirements-leaving the decision on how to fund the remaining security costs to the National Civil Aviation Review Commission."

The "expeditious deployment" of FAA certified Explosive Detection Systems (EDS) was mandated and funded according to the recommendations of the Gore Commission on Aviation Safety and Security. Indeed, the mandate called for a security initiative involving multiple years at funding levels never before experienced. It marked the creation of a Security Equipment Integrated Product Team (SEIPT or IPT), staffed and managed by the FAA to include airline and airport participation thereby assuring industry access to the process. As a groundbreaking initiative in aviation security and considering the enormity of the task, consensus, efficiency and results were all hard fought successes.

However, some myths exist. Some four years after the Gore commission, one might think, 'the job is done'! Not so, in fact it has only just begun. Some four years after the Gore commission, one might think that InVision Technologies Inc., the primary manufacturer of certified EDS has enjoyed four consecutive years of expenditures at the rate of $100 million per year for EDS equipment. This too is not so. In fact, in the year following the initial Gore Commission funding, no funds were available in the 1998 FAA F&E account for EDS. In the 1999 budget, it took an emergency supplemental to fund the recommended $100 million. Not until the current 2000 budget has EDS or aviation security in general, been part of the regular funding of the F&E account.

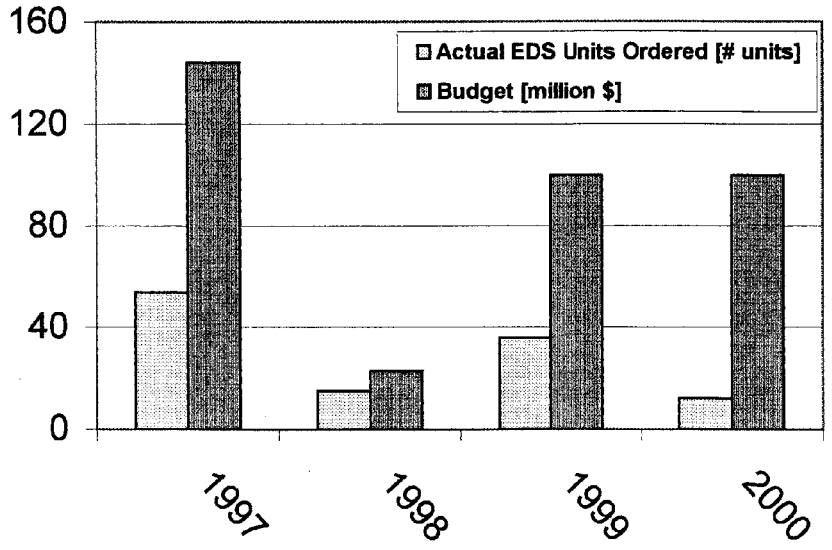
In addition, the portion of the annual funds actually spent to procure certified EDS has continually decreased. This is true for several reasons. The funding recommendation of $100 million per year for EDS has been diluted by expenditures on other activities including K–9 teams, enhancements for existing passenger X-ray machines and hand-held "sniffers". The cost of integrating EDS products began to increase as equipment integration contractors learned from the system manufacturers about the planning requirements for integration, utilization and optimization. While this cost is significant and routinely underestimated it is more cost effective when the EDS system manufacturer is tasked to perform the integration work. Due to the decrease in funding, the equipment deployment goals of the Gore Commission, let alone the 1990 Aviation Security Act, have not been met. Too few bags at too few airports are being scanned today. The gap between the goal and the reality is staggering and grows each day that traffic to and from these airports increases.

It is time to change the direction of EDS funding. The FAA has a plan to implement a security baseline by the year 2004. At that time a small percentage of all bags will be scanned by certified EDS because the use of CAPS, an automated profiling system greatly reduces the quantity of bags that require certified EDS

scanning. Even with that, conservative estimates place the number of EDS units required at approximately 400. That means approximately $100 million per year for budget years 2001 through 2004 will need to be spent on the EDS equipment alone and that achieves only about 5 percent of all bags being scanned! The task from that point forward is the implementation of a plan to move to 100 percent scanning of all bags. To accomplish both the security baseline and the prudent plan to move beyond the baseline, we must:

—Resolve to assure adequate funding to protect the public from the national security threat posed by terrorists.
—Spend funds intended for EDS, on EDS, in the most cost-effective way possible.
—Fund separately those programs that were not part of the assessed requirements to secure checked baggage.
—Understand that while their quest for competition is commendable, the FAA and Congress has failed to provide adequate funding to stimulate and enhance the productivity of a single EDS manufacturer, let alone provide the funding that can assure a healthy, competitive marketplace.

The chart below graphically illustrates the lack of sustained funding and acquisition of certified EDS.



TECHNOLOGY AND THE OPERATOR

Along with the funding issues mentioned above, the experience gained over the past few years help us determine the best path for system development currently underway and anticipated for the future. First, it is well understood that the security opportunity provided by certified EDS is significant. It is also understood that the role of the equipment operator, as verified through years of experience in checkpoint screening, is also crucial. Second, it is further understood that the perfect system would require no operator intervention, have a 100 percent detection rate and no alarms that require operator resolution. It is not likely that technology will produce this "silver bullet" capability any time soon. So, while the early criticism of EDS products was that they were not fast enough, the salient fact that emerges is, the validity of EDS as a technology solution is equally dependent on its performance in the reduction of alarms, as it is on detection and throughput. Therefor the FAA and Congress must remain vigilant to assure that certification standards are never compromised to allow for systems that will increase bag alarms, increase dependence on operator threat resolution and decrease end to end system performance.

To further substantiate the significance of FAA certification standards, it is well known that the FAA plans to reduce the threat quantity detection requirement in its standards. New intelligence is available everyday that directs the FAA in the establishment of standards and technology requirements that get the job done! If ma-

chines with non-certified False Alarm Rates (FAR) are considered deployable now, one can only imagine the negative impact on the aviation security system, if a technology that "misses the mark" of current certification requirements, is deployed and further erodes the nation's commitment to certified EDS.

In the area of operator training and performance, while our knowledge base has increased, optimization remains elusive. Many factors exist, but recent congressional inquiry has identified and debated the issue of responsibility as an important factor. Should the responsibility to provide operators remain with the airlines, shift to the airports or become a government responsibility based on the aviation threat as a national security issue. As always, all points have supporters and detractors, but one thing for sure is that no current plan exists to accurately quantify the true potential of EDS technology with regards to delivered value.

As a solution, InVision urges the FAA and Congress to recognize the extensive experience InVision has gained domestically and internationally in the manufacture, integration and operator training requirements of certified EDS in checked baggage screening. Authorization and funding should be available to the FAA to contract with InVision to provide as a test case for a total "turnkey" solution. With airline/airport partners InVision plans to use its collective experience to optimize end to end system security. The turnkey solution requires InVision to provide operators, plan and implement equipment integration, provide the most cost-effective mix of systems from its family of products in a 100 percent checked baggage scanning initiative. This would allow the all parties to fully assess the true cost and ramifications of a true solution. This would provide the necessary data to understand the challenges we face after the attainment of the security baseline by 2004 and the progression towards the 100 percent screening by the end of the decade.

THE OPPORTUNITY

In spite of the difficulties faced in the mission to secure checked baggage, the FAA, Congress and the traveling public are currently provided more opportunity to advance the deployment of certified EDS than ever before. As of this writing, the FAA has contracted with InVision to provide a complete family of EDS products to satisfy the variety of application requirements in our US aviation system. InVision provides a family of EDS products covering a wide range of price/performance ratios assuring a competitive supply of certified equipment. The CTX 9000DSi is the fastest certified EDS in the world featuring the largest belt size and scanner opening in the industry making it perfect for integrated, high speed solutions, even if 100 percent scanning is necessary. The 5500DS remains the industry workhorse with more than 150 systems delivered worldwide. The newest member of InVision's family of products, the CTX 2500 is the smallest, most cost-effective certified EDS available and is ideally suited to smaller airline operations with low throughput requirements. A truck mounted, mobile version of the 2500 is also available and will be in Washington for demonstration in the month of May. As always with InVision products, performance capabilities with regards detection and low false alarms are never compromised. To the benefit of all, as many as 180 systems are available under contract to expedite the attainment of FAA goals and to combat the menace of terrorism in checked baggage. This is an opportunity that should be adequately funded by Congress and expeditiously implemented by the FAA.

PREPARED STATEMENT OF THE AIR TRAFFIC CONTROL ASSOCIATION, INC.

The Air Traffic Control Association, Inc. ("ATCA") is a professional association of forty-four years standing dedicated to advancement in the science and profession of air traffic control and aviation safety. Its membership is worldwide in scope, and represents all aspects of the air traffic control discipline, from air traffic control specialists and airway facilities technicians who operate and maintain the air traffic control system, to those individuals and companies who develop and manufacture the technology, equipment, and services which support the system, to the citizens, government agencies and airlines who use the system.

ATCA appears before you to urge increased funding for operations and capital improvement programs of the Federal Aviation Administration—activities that are fundamental to maintaining and improving the safety and efficiency of the national air transportation system.

At the dawn of a new millennium, the air transportation community is facing intensifying challenges, as well as unprecedented opportunities for improvements, in air traffic control and aviation safety. Among the most significant challenges—both domestically and globally—is relentless increase in the demand for aviation services which will require more and better facilities to satisfy.

At the same time, however, aviation infrastructure is in dire need of updating and improvement. Although this need has long been recognized, years of deficit economics, budget capping, belt tightening, down sizing, rationalizing, doing more with less, and just plain doing less have taken their toll. Aging ATC equipment is increasingly unreliable, expensive and difficult to maintain. Replacement and modernization projects, starved for resources, are extended or postponed, and the benefits of those improvements are delayed or foregone. Staffing and support resources are so lean that day to day operational needs are all-consuming, leaving little if any time or energy for exploring innovative, efficiency enhancing procedures and operating concepts.

Moreover, the effects of funding deprivation are cumulative. Expert personnel departing through retirement or attrition are very difficult to replace with people of equivalent expertise, especially when resources for employee training and development are scarce, and hiring freezes are the norm. Infrastructure improvement projects are repeatedly interrupted, revised, and re-baselined in conformity with artificial budget restraints; completion horizons recede; potential benefits dwindle relative to cost; and good projects become obsolete or are overtaken by events and scrapped. As refurbishment and improvement is postponed, aviation infrastructure continues to crumble, users and passengers more and more often are delayed and frustrated, and the job of making needed improvements gets bigger and more difficult. No one wants this—not the FAA, not aviation users, not the general public.

The good news, however, is that today's technology—high speed computers, intelligent software, realistic displays and simulation, satellites, advanced sensors and communications equipment—is bringing dramatic improvements to air traffic control. Science and human creativity pose few impediments. The real challenge is assuring that funding, both for the technology, and for the people and support services needed to implement it, is applied to aviation needs in a timely way, and in amounts sufficient to get the job done. A related challenge will be to devise ways and means for commercial, private and military aircraft operators to make corresponding avionics improvements in keeping with FAA's modernization timetable.

The Administration is requesting $11.222 billion for FAA activities in fiscal year 2001, an increase of $1.281 billion (11 percent) over the fiscal year 2000 enacted level. The Air Traffic Control Association urges the Congress to fund the Administration's request in full. This is the very least amount necessary to sustain the current level of activity. But more than that, the Association recommends that the Administration, Congress and the aviation community work together to increase the level of funding for FAA in fiscal year 2001 above the amount proposed, in an amount sufficient for FAA to really address the backlog of deferred needs, and to explore promising concepts and technologies for meeting aviation needs of the new century. ATCA states no position on how FAA needs should be accommodated relative to other budget demands, but the Association does strongly urge that budget relief be provided by some means.

The Administration is seeking $6.592 billion in fiscal year 2001 for FAA Operations, $698.8 million (11 percent) more than the fiscal year 2000 enacted level. This amount includes funding for 202 additional field maintenance staff, 64 new certification/flight standards staff, 35 oversight and assessment staff, and 94 security related staff. It also includes an increase of $135.4 million to make operational new equipment being delivered to support the NAS.

This proposed increase, although significant, is not enough to sustain the current level of operations, much less ensure excellence for the future. Demands on FAA's Operations funding are multiple and growing. The Operations account pays for day-to-day provision of ATC services, maintenance of ATC and other facilities, certification and regulation, security, all administrative services, training, travel, and payroll and benefits related to virtually all FAA personnel. Needs in all of these areas are increasing in keeping with relentless growth in demand for aviation services, and it is important for FAA to be competitive for skilled personnel in a very robust job market. Additionally, accommodating the greater financial burden of a large union contract labor force is putting increased pressure on operations resources.

Moreover, years of austerity budgeting including buy outs, attrition and hiring freezes has depleted FAA's work force of its most experienced and expert staff. As new equipment and systems are delivered in the modernization effort, even the most experienced of staff require education and training. The need for significantly increased funding for personnel hiring and development activities including training has never been greater.

Additional activities such as realistic cost accounting, ATC system performance evaluation, and stepped up collection, analysis, sharing of aviation safety and operations data all require substantial new resources. Globalization of aviation requires increased safety surveillance, more information collection, and collaboration with

aviation partners around the world, requiring more personnel, more travel, and better tools for FAA personnel.

No one wants FAA to have to reduce the level or excellent quality of the services it now provides. After years of belt tightening, the aviation community has come to the conclusion that there is no margin left in the ATC system for more economizing. To the contrary, the aviation community universally agrees that FAA must undertake significant additional activities to satisfy predicted increases in the amount and complexity of air traffic foreseen for the future. Although ATCA cannot say precisely what amount of Operations funding in fiscal year 2001 would allow FAA to launch a full scale, vigorous effort to build capabilities adequate for 21st Century aviation, the proposed 11 percent increase over current funding clearly will not do it. The Association recommends that this increase be at least 20 percent in fiscal year 2001, and that FAA be required to provide the Congress with its estimated funding requirements unrestrained by budget caps.

The Administration is requesting $2.495 billion for FAA Facilities and Equipment in fiscal year 2001, an increase of 22 percent over the fiscal year 2001 enacted level. Even this increase, although substantial, falls far short of the amount required.

Facilities and Equipment funds are used not only for ATC system modernization, but also for sustaining and refurbishing current equipment and systems, many of which will remain in place for the foreseeable future. In 1998, FAA estimated that modernization costs alone based on the National Aviation System Architecture Version 3.0 in effect at that time would be approximately $3 billion per year.[1] Adding to this the annual costs of sustaining and refurbishing equipment already in use, it becomes clear that the true necessary level of F&E funding for FAA in fiscal year 2001 and for the foreseeable future is more in the order of $4.0 billion per year. Because FAA's first priority is maintaining and replenishing equipment and systems already in use, funding below this amount necessarily will impact modernization activities in proportion to the shortfall. At the proposed $2.5 billion level there would be very few modernization projects immune to down scaling, schedule stretch, or interruption.

The Administration is proposing significant amounts of funding for major projects which are central to modernization. Among these items are the Standard Terminal Automation Replacement System ($178.7 million), which will replace antiquated ATC terminal equipment with uniform displays, workstations and software, which is needed to support future ATC requirements. The Wide Area Augmentation System (WAAS) ($111 million) will make the Global Positioning System (GPS) useable for en route, terminal, non-precision, and near Category 1 precision approaches. $105 million is proposed for Terminal ATC facilities replacement, $198 million for Terminal Digital Radar (ASR–11), $77.6 million for replacement of ATC Beacon Interrogator, and $75.5 million for Terminal Automation. All of these are large undertakings with substantial resource requirements. They are absolutely necessary for meeting future needs and will deliver significant benefits both in terms of safety and efficiency. Funding requests for these items must be fully supported.

In addition to these major items, numerous smaller scale projects are vital to modernization. Not only must the Administration's funding requests for these items be fully funded, but additional resources in these areas could accelerate delivery of safety and efficiency benefits to the system. Among these classes of items are projects directed toward improving detection and management of air traffic on the airport surface (e.g. AMASS, ASDE–X), technologies to improve detection and dissemination of aviation weather information (WARP, NEXRAD, TDWR, LLWAS, ASOS, ITWS), communications improvements such as NEXCOM and the FAA Telecommunications Infrastructure project (FTI), and Flight Service Station improvements such as OASIS. Perhaps no one project promises more significant benefits for the price than Controller Pilot Data Link Communications (CPDLC), which provides controllers and pilots the option of communicating through data exchange as well as voice. In test and evaluation, this technology has proved the most effective, quickest way to relieve radio frequency congestion, improve safety and increase system capacity, while at the same time reducing controller workload, and merits strong financial support.

Equally worthy of full funding are FAA's efforts to accelerate implementation of technologies that will yield significant immediate operating benefits. This activity, designated Free Flight, is very important for maintaining user support for mod-

[1] Version 3.0 of the Architecture reflected a consensus view of the aviation community on ATC modernization needs and priorities for new operating capabilities in the National Airspace System. Subsequent versions of the Architecture were revised downward to conform with Administration funding projections for FAA in fiscal years 2000 and beyond, and therefore do not necessarily reflect total modernization needs or accelerated project schedules.

ernization, and to garner near term safety and efficiency benefits for both users and FAA. Products of this effort already successfully fielded include sharing of schedule and ATC data to reduce delay and improve system efficiency (CDM), better sequencing and metering tools for controllers in terminal areas (CTAS), better management of traffic on the airport surface (SMA), and a tool for evaluating airline routing requests for potential air traffic conflicts (URET). In Phase 2 of this activity, FAA plans to intensify implementation of CPDLC, and initiate Reduced Vertical Separation Minima (RVSM), both of which have positive implications for capacity enhancement. The Administration is seeking $221 million for these activities. ATCA urges that this request be fully funded.

The Association also believes that there is a large, unrecognized financial burden to be borne as the transition period between the advent of new capabilities and the retirement of the old (e.g. GPS navigation replacing VOR/DME) stretch out beyond past assumptions. These costs will continue to be substantial and not subject to deferral.

In short, FAA cannot possibly maintain the present ATC system, refurbish current equipment, and continue full scale modernization/replacement of NAS equipment with the current level of funding. When only partial funding trickles down each year to crucial modernization projects, implementations get delayed, costs increase, priorities are readjusted constantly—in short, the entire effort suffers. ATCA urges the Congress to assure that funding enacted for FAA in fiscal year 2001 and future years take into consideration all of the agency's F&E requirements, and be sufficient to sustain a vigorous modernization effort over and above sustainment of current capabilities.

The Administration is requesting only $184 million for Research, Engineering, and Development in fiscal year 2001. The Air Traffic Control Association estimates that the real RE&D funding needs of FAA are more in the order of $500–$600 million in fiscal year 2001 and future years.

The Association is concerned that funding levels for FAA RE&D over the past two years signal an alarming reversal of the Nation's historical commitment to robust aeronautical research and development, particularly R&D that keeps the United States on the forefront of advancements in the science of air traffic control. With more than half of this account earmarked by law for safety, security and related research, funding at the level the Administration proposes will provide very little at all for the RE&D associated with implementation of the NAS Architecture. In draft version 3.0 of the Architecture, FAA estimated this need alone to be $348 million in fiscal year 1999, increasing to $560 million in fiscal year 2000. Even these amounts understate the overall cost of aviation RE&D that should be occurring, because FAA activities traditionally have emphasized applied research. As with all organizations having a highly technical mission, significant funding should be appropriated for basic research—the type of inquiry that can yield breakthrough concepts and technologies that will bring significant long-term benefits. Without generous, continuous support for this type of activity, scientific advance of the quality the United States has heretofore achieved will become a thing of the past.

The Association acknowledges a new level of cooperation between FAA, NASA, DOD, and supporting organizations in achieving long term research goals, embodied in the National Research and Development Plan for Aviation Safety, Security, Efficiency, and Environmental Compatibility, issued November 1999. These efforts certainly are promising, but the Association does not envision them as substituting for a vigorous, focused R&D program within FAA. These multi-organization efforts will complement FAA programs, not substitute for them. Both NASA and DOD recognize that FAA's role as system architect dictates that FAA retain the leadership role in R&D activities feeding into the NAS.

The Administration proposes $1.950 billion in fiscal year 2001, equal to the fiscal year 2000 enacted level, for Airport Improvement Grants. The Air Traffic Control Association urges the Congress to fund this request in full.

The traveling public increasingly experiences the inconvenience and frustration and of delays associated with inadequate system capacity. The need is becoming more and more urgent for more runways, taxiways, and other airport facilities, especially in growing communities. Localities, especially small communities, are hard pressed to pay for airport improvements that keep pace with the expanding aviation marketplace, and yet their residents need to be fully integrated with an economy that is increasingly global. Inadequacies in airport infrastructure, no less than failings in other elements of the air transportation system can become a limiting factor on trade, tourism and local economic activity. Systematic and healthy Federal investment in airport development is an essential component of a balanced plan to meet aviation needs in the future. Certainly, during this time of economic vigor, the Nation should be sustaining and increasing its investment in airport infrastructure.

There is a continuing need for the aviation community and policy makers to pursue consensus on a structure that will assure funding for aviation that is reliable and predictable, as well as sufficient in amount.

The Air Traffic Control Association has long advocated legislation that would separate the Airport and Airway Trust Fund from the unified Federal budget. Such legislation would improve the ability of the Federal government to fund aviation infrastructure improvement projects by eliminating any incentive to maintain positive balances in the trust fund to offset funding deficits in other programs. Moreover, it would facilitate more generous and reliable funding for capital improvements, helping managers plan investment on multi-year basis.

The Association also supports a substantial contribution—at least 25–30 percent—by the Federal general fund toward the costs of FAA Operations. This is right and fair because FAA is responsible not only for operation of the air traffic control system, but also for safety oversight, regulation, certification, and security. These latter activities are inherently government functions necessary to protect the public welfare. Moreover, the general public, even infrequent travelers, benefit from a National Air Transportation System which moves goods, products and mail efficiently and economically, stands ready to assist the Department of Defense in times of crisis, and supports the commerce and tourism that are fundamental to the Nation's robust economy. These benefits are more than worth the public dollars expended.

Research and discussion is ongoing among policy makers and the aviation community about whether additional structural reforms could make the provision of air traffic serves more economical and efficient. Views on these issues at this point are various and divergent, and no one perspective should be permitted to overcome others. ATCA is however confident that deliberations will converge on practical, achievable, consensus recommendations, provided the discussion continues to take into account the needs of all stakeholders, and remains candid, cordial, and positive.

At the dawn of the 21st Century there is great reason for optimism in aviation. Although the challenges are significant—expanding demand, pressing need for infrastructure expansion and modernization, advanced technology is available to meet those challenges. What is needed is consensus within the aviation community—the Administration, Congress, users, the traveling public—about the importance of modernization for meeting air transportation requirements of the future, and the political will and commitment to funding it. Let us fail of neither.

PREPARED STATEMENT OF THE INTERNATIONAL LORAN ASSOCIATION

On behalf of the International Loran Association (ILA), I am submitting this Statement for the Record and respectfully request it be added to the Senate Transportation Appropriations Subcommittee on Federal Aviation Administration fiscal year 2001 Appropriations Bill.

In recent years the Committee has supported numerous steps and provided more than $25 million in additional resources to ensure the Loran-C system will be maintained and upgraded to meet ongoing navigation and timing needs and to meet national transportation and infrastructure safety objectives. In conjunction with work on the fiscal year 2001 DOT Appropriations bill, we urge the Committee to continue its critical support for Loran by providing $30 million in fiscal year 2001 Federal Aviation Administration (FAA) Facilities and Equipment resources for Loran system improvements and revitalization to meet existing and future user requirements.

There has been considerable good domestic and international news about Loran recently, which I am sure the Committee will find of interest when considering our request. First, domestic Loran support from its millions of users and beneficiaries has continued to be strong and vocal. These individuals support Loran because it is a proven, cost-effective, multimodal system and because it is uniquely complementary to satellite technology. Users and groups as diverse as the Aircraft Owners and Pilots Association (AOPA), BOAT/US, and American Association of State Highway and Transportation (AASHTO) have stood firmly behind Loran for years, and even Motorola has written Secretary Slater to endorse Loran for telecommunications timing applications essential to the stable operation of our national infrastructure.

This widespread domestic support has also been validated by recent Loran cost/benefit and performance studies conducted by Booz-Allen & Hamilton (BA&H) and other independent groups for the DOT and FAA. These studies document Loran provides a very positive cost/benefit to the nation, and furthermore, new Loran technology offers important opportunities to complement and enhance satellite system performance. In fact, it is now generally acknowledged that GPS and Loran are actually synergistic, i.e. a combined system integrating both technologies can perform better than either alone, even with the planned augmentation programs.

The FAA has recognized the opportunity to combine GPS and Loran, and announced a new Loran program at the recent International Civil Aviation Organization (ICAO) meetings in Montreal. For the first time, the FAA will flight test new Loran technology and develop/evaluate a combined GPS/Loran receiver that offers tremendous promise for aviation applications. This news was announced almost immediately after installation of the Loran Aviation Blink System (ABS), which was completed upon direction contained in earlier Committee actions.

It is also important to note the United States Coast Guard (USCG) is well on its way to upgrading the Loran system. These improvements have included the purchase and installation of new Cesium clocks and the development of new monitoring receivers to improve performance of the system. These and other planned enhancements will not only assure improved Loran operations, but also reduce annual operations and maintenance (O&M) costs by about 44 percent.

Overall, the truly multimodal benefits Loran currently provides our nation are now broadly recognized and appreciated. For example, tens of millions of Americans use wireless telecommunications networks for functions as diverse as 911 calls, stock trades, and E-business, and these networks utilize GPS as the primary timing reference. In such applications, Loran provides a necessary backup timing reference of equal quality to GPS, and ensures continued function of these national infrastructure systems in case of GPS disruption.

The 1999 Federal Radionavigation Plan (FRP) explicitly states Loran will be continued. In further acknowledgment that Loran has an important role within the future global navigation and timing infrastructure, the DOT also requested that the Administration's fiscal year 2001 budget include $30 million to continue revitalizing the U.S. Loran system. In this context, the Committee should be aware that the 1998 BA&H studies indicate the costs to upgrade or decommission Loran were virtually identical; now that significant upgrades have taken place due to the Committee's actions, decommissioning this national asset would actually cost more than the remaining upgrades.

Unfortunately, the Administration's budget includes a request for only $20 million for Loran modernization, but the ILA hopes the Committee remains convinced of the long term cost, performance and safety benefits the $30 million will provide. Once the upgrades are complete, the entire annual Loran O&M cost is expected to total $15 million, and years of operational experience substantiate that estimate. This is a remarkably small cost for such a valuable national asset—some even refer to Loran as a national insurance policy—and represents less than 0.04 percent of projected DOT budgets.

Internationally, the Loran situation looks even brighter, and I am pleased to report that future US exports of Loran-based products should be able to address substantial global markets. For example, Europe is proceeding with the distribution of differential GPS information using their Loran system (i.e. the Eurofix system). A European initiative has been formed entitled Global Augmentation for Satellite Systems (GAUSS), and consists of a number of European Union (EU) government officials, European manufacturers, and user groups. This GAUSS initiative will support the global integration of Loran with satellite systems, and assist in opening major new markets in Europe, Russia, and Asia. I also expect GAUSS will help to grow international GPS markets for US industry, as integrated GPS/Loran systems provide local autonomous control for one part of the system, and alleviate international concerns with U.S. control of GPS signals.

Another major international event was a March 22–23 Loran meeting in Bonn, Germany that was organized by the German Institute of Navigation and sponsored by the German Ministry of Transport, Building, and Housing. Government and industry representatives from 15 European countries and the US attended the conference, and interest in Loran and private/public partnerships to develop systems was extremely high. In addition, it is virtually assured the United Kingdom will now join the Northern European Loran System (NELS), and discussions with Italy and other countries will commence shortly.

In further support of prior Committee actions and increased funding for upgrades, I am also pleased to convey Loran is now expected to play a major role in US telecommunications exports to China. China has recently opened its markets to US telecommunications technologies, but did not want those systems dependent on GPS. As indicated above, GPS is extensively used as the primary timing reference to synchronize vast telecommunications networks in the US, where Loran is often used as a backup to GPS. Since Loran can perform that same role indefinitely, it plays a fundamental role in supporting our national infrastructure and ensuring continuity of service. However, China also has a modern Loran system, so Loran can replace GPS in this essential role and simultaneously support U.S. exports and trade balance. Exports of U.S. telecommunication equipment based on Loran as the

primary timing reference are expected to total a half billion dollars in 2000 alone, with much greater future potential.

In summary, the last two years have been extremely good for Loran, and with the Committee's help, the next decade looks much better. Simply continuing the Loran upgrade program will not only save millions of future taxpayer expenditures, but moreover, create substantial domestic and international business opportunities for US companies. Perhaps most importantly, upgrading the Loran infrastructure will ensure our essential national navigation/timing infrastructure, which literally affects nearly all Americans today, can continue to function in case of a GPS failure, regardless of the cause. The Committee's support will establish Loran as a national insurance policy for all Americans, and at $15 million annually, this policy could not be more cost effective.

In conjunction with your work on the fiscal year 2001 DOT Appropriations bill, we respectfully urge the Committee to continue its critical support for Loran by providing $30 million in fiscal year 2001 Federal Aviation Administration (FAA) Facilities and Equipment resources for Loran system improvements and revitalization.

PREPARED STATEMENT OF THE HELICOPTER ASSOCIATION INTERNATIONAL

The Helicopter Association International (HAI) submits this statement to Congress to add its unqualified support for Loran-C navigation infrastructure. HAI is the professional trade association for the civil helicopter industry. Its 1,500-plus member organizations and 1,400-plus individual members, in more than 70 nations, safely operate more than 5,000 helicopters approximately 2 million hours each year. HAI is dedicated to the promotion of the helicopter as a safe, effective method of commerce and to the advancement of the civil helicopter industry.

Every day in the United States, helicopters save lives. Because of their unique flight capabilities, rotorcraft are used extensively for public safety missions, natural resource management, energy exploration, security transportation, emergency medical evacuation, law enforcement, and for numerous other functions which add tremendously to America's quality of life.

The Loran-C signal has been used extensively by both commercial and government helicopter operators. The rotorcraft industry has invested millions of dollars in navigation equipment that depends on the Loran-C signal. This fact is a bold testament that Loran-C is effective and reliable. Loran-C is a companion to the future navigation system of U.S.-GPS. It is important to recognize that the Loran-C signal is qualitatively different from the GPS signal in these significant ways:

—GPS is a straight "line-of-sight" signal whereas Loran-C signals are stronger and follow the curvature of the earth and its topography. This is why Loran-C is perfectly suited not only for ships at sea level, but for low-altitude aviation operations.

—GPS can be lost due to aircraft position or Department of Defense needs. By contrast, Loran-C is operated by the Department of Transportation.

—GPS is a space-based system; maintenance requires multi-million-dollar missions to repair. Loran-C is a ground-based system; technicians drive themselves to the equipment.

—Ionospheric phenomena affect each system differently. Thus while one system may be unusable the other is usually available.

—Not only is Loran-C supplementary to GPS, it is capable of serving as a fully independent backup system.

These qualities make Loran-C the perfect compliment to GPS. HAI fully supports GPS-based navigation as the principle navigation source with Loran-C as a supplemental and backup system. GPS, WAAS, and LAAS also will contribute substantially to helicopter safety and efficiency, thus enabling them to conduct more life-saving missions, particularly in marginal weather conditions. HAI envisions a future in which aircraft use inter-operable navigation systems that function by incorporating both GPS and Loran-C signals. When events of nature or politics result in loss of the space-based signal, even for an isolated region of airspace, Loran-C can sustain aviation operations. But with the proven performance of Loran-C, it is fully capable of supporting aviation operations, including the public safety missions of helicopters.

HAI urges Congress to fully support Loran-C navigation infrastructure. Sufficient funds should be made available for both maintenance and performance enhancement of this time-proven system which is uniquely adaptable and beneficial to cutting-edge technology. For more information, please contact Bill Wanamaker, HAI Senior Congressional Liaison at (703) 683–4646.

PREPARED STATEMENT OF THE UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH

On behalf of the University Corporation for Atmospheric Research (UCAR) and the university community involved in weather and climate research and related education, training and support activities, I submit this written testimony for the record of the Senate Committee on Appropriations, Subcommittee on Transportation.

This year UCAR, a university membership consortium composed of 63 North American institutions that grant the Ph.D. in atmospheric, oceanic, and related sciences, celebrates its fortieth anniversary of scientific discovery and university partnerships. The UCAR mission is to support, enhance, and extend the capabilities of the university community, nationally and internationally; to understand the behavior of the atmosphere and related systems and the global environment; and to foster the transfer of knowledge and technology for the betterment of life on earth. UCAR is a non-profit, Colorado-based corporation that manages and operates the National Center for Atmospheric Research (NCAR) and the UCAR Office of Programs (UOP). It is supported by the National Science Foundation (NSF) and other federal agencies including the Federal Aviation Administration (FAA), the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautics and Space Administration (NASA), the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the Department of Defense (DOD).

According to the National Transportation Safety Board, approximately 35 percent of aviation fatalities occur in weather-related accidents. Last year almost 72 percent of recorded commercial flight delays were caused by weather. To achieve the federal government's goals of reducing fatal accidents by 80 percent and delays by 20 percent, improved weather forecasts and dissemination become critical. Regarding the fiscal year 2001 budget for the Federal Aviation Administration, I would like to comment on aviation weather research, an extremely important initiative to our nation and the flying public:

Within the FAA's Research, Engineering and Development (RE&D) account, I urge you to support the request of $28 million for the FAA's Weather Program. This is an increase of $8 million over fiscal year 2000 that will support a number of research programs within universities and laboratories. Although much progress has been made, weather today continues to be a major factor in causing aviation delays and safety hazards. The FAAs aviation weather program focuses on conducting applied research in partnership with the weather research and user communities, and in transferring advanced weather detection and prediction algorithms into operational use. The proposed increase would support such new initiatives as hazardous weather forecasting and the establishment of a national ceiling and visibility program. This increase in funding also reflects strong support across the entire user community for the broad focus and effectiveness of this critical safety research.

NCAR, funded in large part by the National Science Foundation (NSF), receives FAA Weather Program support to apply NSF-funded weather research to aviation safety problems. NCAR's Research Applications Program (RAP) conducts research and develops products for the aviation industry and airports by utilizing NCAR and university community meteorological research results and technology. During the past 15 years, the work of RAP and collaborating universities and industries has resulted in major improvements to the safety of airports and aircraft in the United States. FAA sponsored programs have improved weather information for pilots, dispatchers, and controllers through research and the development of technology related to the hazards of thunderstorms, wind shear, turbulence, en route icing and ground deicing, en route turbulence, teffain-induced turbulence, and in-flight visibility.

The Aviation Digital Data Service (ADDS) is just one example of the FAA funded weather aviation technologies being developed at RAP to enhance aviation safety. Available on the Internet (at http://adds.awc-kc.noaa.gov/), ADDS provides pilots, dispatchers and air traffic control with real-time digital and graphical analyses of weather data, forecasts, and observations of flight weather variables. An interagency effort, it is being developed through a cooperative effort between RAP and the National Oceanic and Atmospheric Administration (NOAA).

On behalf of UCAR, as well as our nation's frequent flyers, I want to thank the Committee for the important work you do for U.S. scientific research, education, and training. I appreciate your attention to the recommendations of our community concerning the fiscal year 2001 budget.

PREPARED STATEMENT OF THE CITY OF VERO BEACH, FLORIDA

This statement, in conjunction with work on the fiscal year 2001 Department of Transportation and Related Agencies Appropriations Bill, seeks your support and the support of the Committee for $5.2 million in funding from the Federal Aviation Administration (FAA) Budget for construction of a replacement Air Traffic Control Tower at the Vero Beach, Florida Municipal Airport as an urgent aviation safety initiative.

This is a facility that is operated by the FAA and staffed with FAA controllers. The good news is that we are pleased that the FAA supports this project and much work has already been accomplished on the project. The bad news is every time we seem ready to get construction funding our project is delayed.

We are compelled to seek your help because this is an urgent, long overdue aviation safety project and it is the most important safety enhancement that can be made at our airport to meet current and anticipated future user requirements.

VERO BEACH AND THE TREASURE COAST

Vero Beach is located along the East Coast of South Florida in an area known as the Treasure Coast. The area was named Treasure Coast because of the Spanish galleons sunk along the coast by hurricanes, but we like the name because the area is a true "treasure" to the local residents.

We are the home of the Los Angeles Dodgers Spring Training facility, the Vero Beach Disney Resort, and other well-known business ventures. Vero Beach is a conservative community made up of working professionals, young families, long-time residents, retired business owners, and others who enjoy the lifestyle that South Florida has to offer. Corporate executives have located homes and businesses in Vero Beach both because of our quality of life and because of our access to major metropolitan areas in Central and South Florida.

VERO BEACH MUNICIPAL AIRPORT

The airport is owned and operated by the City of Vero Beach and located in the heart of Indian River County, close to major highways and modern business infrastructure. There are over 110 businesses located at the airport, inside our Airport Industrial Park, and surrounding the commercial center, and about 250 aircraft are based at our facility. A recent update to our last economic study indicates that businesses at the airport contribute almost $300 million annually to the local economy. Our two largest aviation businesses, The New Piper Aircraft, Inc., and FlightSafety International, Inc., contribute significantly to our being a very busy general aviation airport.

According to the FAA's Terminal Area Forecasts for fiscal year 1998, traffic at Vero Beach has grown from about 180,000 to nearly 240,000 operations annually in recent years, indicating that operations at the facility may rank it among the top 15 percent of towered airports in the United States. In fact, based on the FAA data, our airport—which has no radar—has become the second busiest general aviation airport in Florida and future traffic growth is estimated to reach 270,000 operations annually.

We are very fortunate and delighted that our airport is headquarters for The New Piper Aircraft manufacturing facility and its workforce of more than 1200 employees. Piper is a great partner with the city, and an important economic asset to our community with its payroll of about $42 million annually.

Also important—and it cannot be overemphasized from a general aviation safety perspective—our airport is the home of the busiest flight training organization in the world. FlightSafety International has 42 locations worldwide, and they train over 65,000 pilots and mechanics per year. Their largest and busiest flight school is at Vero Beach, with a staff of more than 250 employees. Moreover, Vero Beach is unique among all the FlightSafety training facilities because ours is the only location where aircraft—not just simulators—are utilized for training. The company operates a fleet of more than 90 aircraft, which are logging nearly 90,000 hours of student flight training annually. Nearly 1000 international airline cadet and other student pilots from all over the world are taught and trained by FlightSafety every year at Vero Beach, requiring constant vigilance and stringent air traffic control.

Officials from both Piper and FlightSafety have asked that their support for this request be conveyed to the subcommittee. The presence of these two great aviation companies in Vero Beach has been of enormous importance to our community and our airport.

We are also proud of the fact that Vero Beach has enjoyed a long-standing partnership with major league baseball. The Los Angeles Dodgers baseball organization

has, since 1948, maintained close ties to the community, and the Dodgers call Vero Beach home for its extensive spring training operations and facilities, which are practically within walking distance of the airport.

TOWER CONSTRUCTION FUNDING IS ESSENTIAL

We hope our testimony will help convince you and other members of the subcommittee about the need and strong justification for funding this essential aviation project.

At our airport we have an outstanding safety record. For the past nine years we have achieved a perfect record in FAA safety inspections; zero discrepancies on each FAA evaluation. A large measure of the credit for the outstanding safety record goes to the extremely dedicated and very experienced career FAA controllers working in Vero Beach. They are doing an exemplary job at our current tower facility under some very difficult conditions.

There is virtually unanimous agreement in our community among pilots, controllers, airport officials, and airport tenants, government officials and others interested in aviation that a new tower is an essential safety priority for the airport.

Because the modern new tower structure will be considerably taller than the present facility, we even took the important step of gauging, and ultimately winning, community and public support for the FAA tower replacement project through a public referendum that produced 84 percent voter support.

Specifically, we are seeking support from the Appropriations Committee for: Fiscal year 2001 funding of $5.2 million from the FAA Facilities and Equipment (F&E) Account for the construction phase of a replacement Air Traffic Control Tower at the Vero Beach Municipal Airport as an essential aviation safety priority.

EXISTING TOWER OBSOLETE AND INADEQUATE

The existing tower has been in use since 1973 and simply cannot accommodate current or anticipated aviation safety, user and air traffic controller requirements.

The structure is obsolete, rusting, continually leaks water during rainy weather, equipment space is cramped, the tower cab is inadequate for new technology or equipment, electronic and electrical systems are outdated and the communications system is aging.

Because of continuing airport growth and development over the past 25 years, controllers are limited by obstructed visibility for about 30 percent of our total annual operations and they have no visibility at all of aircraft ground movements in certain areas of the airport.

All the training done by FlightSafety International makes our airport one of the busiest training facilities in the world. It is noteworthy that foreign speaking students comprise about 25 percent of the hundreds of airline cadet and student pilots that are trained at Vero Beach every year. A circumstance creating communications and other challenges that demand constant caution, care and attention.

It is significant that the FlightSafety staff, working in close coordination with our local controller workforce, also has a spotless safety track record. Another remarkable example of the high level of standards maintained by aviation professionals working at our airport.

Finally, there is an increasingly heavy volume of business and corporate aviation traffic at the airport in the winter as pilots try to avoid possible delays and congestion at other South Florida airports. Then, again in the spring because of spring training baseball activities at the Dodgers complex.

PROJECT STATUS

The FAA, in 1988, first identified an aviation safety need for a new Air Traffic Control Tower at the Vero Beach Municipal Airport as a result of growing traffic, increased line-of-sight problems caused by airport development, human factors issues for controllers, and other technology and modernization issues.

We have worked hand-in-hand with FAA Southern Region officials and others since that time to advance this project and, as previously mentioned, the FAA fully supports the project.

The FAA included a request for the tower replacement in a budget request more than five years ago and began project funding in fiscal year 1996. The planning at that time contemplated that tower construction would start in 1998 with a commissioning date expected in 2001. All tasks including engineering, design, site work and an environmental review have been completed. Since then, funding of the construction phase of the project has been deferred because of other priorities. It was first deferred until 2000 and then, this past November, we were informed that construc-

tion will not begin until 2002 and the new tower will not be commissioned until 2005.

CONCLUSION

We have tried to be patient and we understand the difficult budget choices that have to be made by the FAA, but pilots, controllers, airport and government officials all believe there is an increasingly urgent aviation safety requirement for a new Air Traffic Control Tower at this extremely busy general aviation airport.

You and your colleagues on the Appropriations Committee have consistently supported steps and added considerable resources to the FAA Budget to accommodate identified general aviation priorities like ours that promise to enhance aviation safety.

The City of Vero Beach, airport staff, and all who share responsibility for aviation safety at and around our airport are equally focused on the goal of enhancing aviation safety in view of anticipated future traffic growth estimated to reach about 270,000 operations annually at the facility.

We stay in constant communication and discussions with the FAA staff in the Southern Region. We collaborate with pilots, controllers and many of our tenants and concessionaires to keep a close eye on opportunities to find any additional aviation initiative that will offer constructive, cost-effective benefits.

At the same time, we will continue to do all possible to be responsive to expressed needs and concerns in our community with respect to airport issues.

Completing our new tower construction project, promises to substantially enhance aviation safety, capacity and efficiency at our airport; it has the full support of pilots, controllers, the community, city and airport officials, the FAA and others interested in aviation and; it is a prudent, cost-effective use of FAA resources that warrants your support.

We respectfully urge the Committee to fully support our request for $5.2 million in fiscal year 2001 funding from the FAA Facilities and Equipment Account for the construction phase of the Air Traffic Control Tower replacement project at the Vero Beach Municipal Airport.

FEDERAL HIGHWAY ADMINISTRATION

PREPARED STATEMENT OF THE CALIFORNIA INDUSTRY AND GOVERNMENT CENTRAL CALIFORNIA OZONE STUDY (CCOS) COALITION

Mr. Chairman and Members of the Subcommittee: On behalf of the California Industry and Government Central California Ozone Study (CCOS) Coalition, we are pleased to submit this statement for the record in support of our fiscal year 2001 funding request of $250,000 from the Department of Transportation (DOT) for CCOS as part of a Federal match for the $8.6 million already contributed by California State and local agencies and the private sector.

Ozone and particulate matter standards in most of central California are frequently exceeded. In 2003, the U.S. Environmental Protection Agency (U.S. EPA) will require that California submit SIPs to for the recently promulgated, national, 8-hour ozone standard. It is expected that such SIPs will be required for the San Francisco Bay Area, the Sacramento Valley, the San Joaquin Valley, and the Mountain Counties Air Basins. Photochemical air quality modeling will be necessary to prepare SIPs that are acceptable to the U.S. EPA.

Central California Ozone Study (CCOS) is designed to enable central California to meet Clean Air Act requirements for ozone State Implementation Plans (SIPs) as well as advance fundamental science for use nationwide. The CCOS field measurement program will be conducted in the summer of 2000 in conjunction with the California Regional PM10/PM2.5 Air Quality Study (CRPAQS), a major study of the origin, nature, and extent of excessive levels of fine particles in central California. CCOS includes an ozone field study, a deposition study, data analysis, modeling performance evaluations, and a retrospective look at previous SIP modeling. The CCOS study area extends over central and most of northern California. The goal of the CCOS is to better understand the nature of the ozone problem across the region, providing a strong scientific foundation for preparing the next round of State and Federal attainment plans. The study includes six main components:

—Developing the design of the field study (task already underway)
—Conducting an intensive field monitoring study, scheduled for June 1 to September 30, 2000
—Developing an emission inventory to support modeling
—Developing and evaluating a photochemical model for the region

—Designing and conducting a deposition field study

—Evaluating emission control strategies for the next ozone attainment plans

CCOS is directed by Policy and Technical Committees consisting of representatives from Federal, State and local governments, as well as private industry. These committees, which managed the San Joaquin Valley Ozone Study and are currently managing the California Regional Particulate Air Quality Study, are landmark examples of collaborative environmental management. The proven methods and established teamwork provide a solid foundation for CCOS. The sponsors of CCOS, representing state, local government and industry, have contributed approximately $8.6 million for the field study. In addition, CCOS sponsors will provide $4 million of in-kind support. The Policy Committee is continuing to seek additional funding ($9.0 million) for a future deposition study, data analysis, and modeling. California is an ideal natural laboratory for studies that address these issues, given the scale and diversity of the various ground surfaces in the region (crops, woodlands, forests, urban and suburban areas).

There is a national need to address national data gaps and California should not bear the entire cost of the addressing these gaps. National data gaps include issues relating to the integration of particulate matter and ozone control strategies. The CCOS field study will take place concurrently with the California Regional Particulate Matter Study—previously jointly funded through Federal, State, local and private sector funds. Thus, CCOS is timed to enable leveraging of the efforts for the particulate matter study. Some equipment and personnel can serve dual functions so that CCOS is very cost-effective. From a technical standpoint, carrying out both studies concurrently is a unique opportunity to address the integration of particulate matter and ozone control efforts. CCOS will also be cost-effective since it builds on other successful efforts including the 1990 San Joaquin Valley Ozone Study. To effectively address these issues requires federal assistance and CCOS provides a mechanism by which California pays half the cost of work that the federal government should pursue.

For fiscal year 2001, our Coalition is seeking funding of $250,000 from DOT through highway research funds. DOT is a key stakeholder because federal law requires that transportation plans be in conformity with SIPs. The motor vehicle emission budgets established in SIPs must be met and be consistent with the emissions in transportation plans. Billions of dollars in federal transportation funds are at risk if conformity is not demonstrated for new transportation plans. As a result, transportation and air agencies must be collaborative partners on SIPs and transportation plans. SIPs and transportation plans are linked because motor vehicle emissions are a dominant element of SIPs in California as well as nationwide. Determining the emission and air quality impacts of motor vehicles is a major part of the CCOS effort. In addition, the deposition of motor vehicle emissions and the resulting ozone is a nationwide issue.

Thank you very much for your consideration of our request.

PREPARED STATEMENT OF THE COUNTY OF SAN BERNARDINO, CA

Honorable Chairman Shelby and members of The Subcommittee on Transportation and Related Agencies Appropriations, we appreciate the opportunity to present our Application for Grant funding for the Etiwanda Interchange Improvements under the National Corridor Planning and Development Program and Coordinated Border Infrastructure Program—Implementation of the Transportation Equality Act for the 21st Century. We are seeking with this Application a Grant of $10,000,000 to be applied to the $5,949,100 in private match from the Kaiser Commerce Center which equates to 37 percent. When funded, the re-construction of the Etiwanda/Valley Boulevard, I–10 Interchange and significantly enhance the overall safety of the existing interchange, as well as provide a much needed 1,276 stall truck stop to accommodate the 43,000 tractor trailer trucks that are presently converging on the I–10 /I–15 interchange on a daily basis.

This project is presented for consideration based upon eligibility Criteria number 5 as presented in the Federal Register. Criteria 5 relates to "construction after review by the Secretary of a development and management plan for the corridor or useable section of the corridor". The request contained within this application is for construction funding for a "useable section" of the I–10 corridor (Congressional High Priority Corridor Number 34).

The project presented will be developed in conjunction with the adjoining land to the north of the interchange. Two land uses will be constructed which when combined meet all of the selection Criteria set forth in the Federal Register. A 200 acre multi-modal rail served distribution complex is planned to be constructed along with

a 75 acre Truck Plaza offering 1,276 trucks and drivers cargo safety and drivers rest.

With the project's proximity to the I–15 /I–10 interchange (1 mile east on I–10) cargo can be moved by rail and truck from Mexico and the Ports to regional and national destinations. Growth projections for Southern California point to significant increases in the amount of goods that are expected to be moved within and through the region. Projects such as this will aid in relieving congestion and improving the time it takes to move these goods. This is another piece of the infrastructure required to accommodate current demands as well as the projected future needs of Southern California.

In addition, this project provides a significant local/private match of 37 percent of total construction costs to meet the goal of maximum leveraging of Federal funds. Since this is a single project the funds can be quickly obligated with construction commencing in early 2001 and completion by the Spring of 2002, while requiring no additional Federal funding.

The project is in the state of California, County of San Bernardino, and lies within the 42nd Congressional District of the late Congressman George Brown Jr. and the newly elected Congressman Joe Baca. This was a project of special importance to the late Congressman Brown and Congressman Baca is enthusiastically endorsing the reconstruction of the Etiwanda Interchange. Additionally, Senators Dianne Feinstein and Barbara Boxer enthusiastically support the reconstruction of this critical interchange.

PROJECT OBJECTIVES

The project objectives are to: (1) Improve operational efficiency at the existing Etiwanda Avenue Interchange and Valley Boulevard Ramps on I–10; (2) Reduce weaving conflicts on Etiwanda Avenue over I–10 and on the I–10 collector-distributors roads under Etiwanda Avenue; (3) accommodate projected traffic growth due to changes in land use on Kaiser West End Properties north of I–10; (4) minimize effects of construction activities on I–10 traffic; and (5) minimize disruption of existing trucking operations along Etiwanda Avenue and Valley Boulevard.

The project will be constructed concurrent with the development of the adjacent properties to the North known as the Kaiser Commerce Center. The Kaiser Commerce Center will provide a major multi-modal industrial complex served by both major railroads in this region (the BNSF and UP railroads), as well as provide a much needed truck plaza facility offering rest and safety to approximately 1,276 trucks per night.

PROPOSED WORK

The project will reconstruct the Interstate Route 10/Etiwanda Avenue Interchange from the existing four-quadrant full-cloverleaf interchange to a Partial Cloverleaf "A" configuration. The improvement also included realignment of existing Valley Boulevard further north. The existing Valley Boulevard on- and off-ramps would be reconstructed to meet the realigned Valley Boulevard at a new local road, "lag Haul Road" The proposed westbound on-ramp would be elevated over the westbound I–10 Etiwanda Avenue off-ramp. The eastbound exit ramp to Valley Boulevard under I–10 would be reconstructed to provide standard vertical clearance. The proposed improvement would utilize both a realigned Valley Boulevard ramp system and improvements at the Etiwanda Avenue Interchange with I–10, as described above. This configuration would provide easy entrance and exit movements to the area north of I–10 west via the former Valley Boulevard ramps, newly realigned to Slag haul Road. Access to and from I–10 east would be provided via improved Etiwanda Avenue interchange loop ramps.

The project includes the following detailed components:

Partially Reconstruct the Etiwanda/I–10 Interchange.—This component would include the conversion of the existing four-quadrant full-cloverleaf interchange to a two-quadrant partial cloverleaf design.

Widen Etiwanda Avenue North of I–10.—Etiwanda Avenue from the I–10 interchange north to the intersection of Valley Boulevard would be widened to three travel lanes in each direction plus double left-turn lanes at intersections. This widening would be provided to improve weaving conditions for traffic entering and exiting I–10.

Realign and Extend Valley Boulevard.—This component would include reconstruction of Valley Boulevard from east of the UPRR spur track and extend the road west to connect with the realigned I–10 ramps and a future north-south roadway. The relocated Valley Boulevard would be elevated over the Union Pacific Railroad Spur

and the San Sevaine Flood Control Channel, thus significantly improving traffic/railroad safety. Two structures would be included in this segment:

Valley Boulevard Overhead would carry six lanes of traffic, plus a median, sidewalks and traffic barriers over the Union Pacific Railroad corridor.

Valley Boulevard Concrete Box Culvert would carry six lanes of traffic, plus a median, sidewalks and traffic barriers over the San Sevaine Flood Control Channel.

Valley Boulevard would be extended to Etiwanda Avenue, providing a new arterial street parallel to I–10. This alignment would coincide with a future relocation of Ontario Mills Parkway to ultimately provide proper spacing on intersections. (The Valley Boulevard extension from Slag Haul Road to Etiwanda is not part of this project. Kaiser Ventures Inc. will construct this segment as part of the development of the Kaiser Commerce Center. Non-Federal funds will be used to construct this segment.) This extension would provide the major east-west connection for sub-regional traffic and would provide access to properties abutting I–10.

Reconstruct the Westbound Etiwanda/Valley Ramps to and from I–10.—A major component of the project would be the reconstruction of the existing Valley Boulevard ramps to and from I–10 west to become access ramps to and from Slag Haul Road.

Slag Haul Road On-Ramp Separation would carry one land of traffic, plus shoulders and traffic barriers over the Etiwanda Avenue Off-Ramp from westbound I–10.

Construct and Eastbound Auxiliary Lane on I–10.—In order to improve weaving conditions between I–15 and Etiwanda Avenue, a new 3.6m (12 ft.) wide auxiliary land would be provided between the I–15 on ramp to eastbound I–10 and the eastbound Etiwanda Avenue exit ramp.

PLANNING AND COORDINATION STATUS

The project is included in the 98/99–2004/2005 Regional Transportation Improvement Program (RTIP) as adopted by FHWA on July 31, 1998. The project reference number in the RTIP is 08–35–450, Page # 173.

TRAFFIC/SAFETY INFORMATION AND PROJECTIONS

The project improvements will considerably improve interchange operations, reduce local street congestion, and accommodate projected growth in the area. The project proposes to convert the existing Etiwanda Avenue Interchange from a four quadrant full cloverleaf to partial cloverleaf configuration. In addition, the project will realign Valley Boulevard on- and off-ramps to the north to intersect with the realigned Valley Boulevard. The Slag Haul Road (Valley Boulevard) on-ramp would be braided over the westbound I–10 Etiwanda Avenue off-ramp, thus eliminating weaving movements in that direction. The westbound I–10 Etiwanda Avenue off-ramp, the existing westbound Etiwanda Avenue loop on-ramp and enter the freeway.

The proposed project would improve safety throughout the interchange. Presently, congestion and increased truck traffic result in excessive delays, increased traffic accidents and operational problems at Etiwanda Avenue interchange with Route 10.

The existing weaving on the westbound Etiwanda Avenue collector-distributor road where the Valley Boulevard on-ramp merges would be eliminated by the proposed "braided ramp" configuration. In addition, the reconfigured Etiwanda Avenue Interchange would also eliminate weaving for both eastbound and westbound on- and off-ramp traffic as the existing loop off-ramps would be eliminated. The northbound Etiwanda Avenue to westbound Ontario Mills Parkway traffic would have a longer weaving distance, since the ramp terminus would be realigned to a signalized intersection. Ultimately, Ontario Mills Parkway would be realigned to coincide with the Valley Boulevard extension. This would increase the distance between the off ramp terminus intersection and the local intersection to 160m (524 ft.).

The realigned Valley Boulevard would be grade-separated over the existing Union Pacific Railroad Spur, which would eliminate the existing at-grad railroad crossing preventing potential rail/auto accidents.

The substandard vertical clearances at the Valley Boulevard under crossings of Route 10 would be improved to meet the federal standard of 5.1m (16.7 ft.). This would be accomplished by lowering the ramp profile.

A three-year Traffic Surveillance and Analysis Survey (TASAS) study for the period April 1, 1994 through March 31, 1997 was made for the project vicinity. The study revealed that there were 98 accidents with 1 fatality and 35 persons injured. The actual accident rates for most of the on- and off-ramps at the interchange were higher that the average rate for similar facilities.

A total of 98 accidents were reported in the interchange ramp system during the three-year study period. Forty-four accidents (45 percent) occurred in the four-loop-ramp system.

It is obvious that the reconstruction of the Etiwanda interchange will dramatically improve safety to motorists and truck traffic. With the development of the Kaiser Commerce Center's 7.8 million square feet of industrial warehouse distribution space over the next six years, this reconstruction is paramount to insure that public safety is at the forefront to this critical transportation corridor.

TOTAL ESTIMATED COST OF IMPROVEMENTS

The total estimated costs for improvements is as follows:

Roadway Items	$10,108,000
Structure Items	1,120,000
Sub-Total Construction	11,228,040
Right of Way & Utilities	1,100,000
Total Project Construction	12,328,000
Design	1,921,060
Construction Management	1,300,000
Fees & Permits	400,000
Total Project Costs	15,949,100

Previous Funding.—The project was allocated $1,5000,000 in the Transportation Equity Act for the 21st Century (TEA–21).

AMOUNT OF NCPD PROGRAM FUNDS REQUESTED

$10,000,000 is requested per this application.

Commitment of other Funds.—The project is to be constructed concurrent with the development of adjacent property owned by Kaiser Ventures Inc. The project, known as the Kaiser Commerce Center, will provide additional infrastructure to supplement the interchange reconstruction. Of the Total $15,949,100 estimated cost for the interchange reconstruction, Kaiser Ventures and its development partners will provide the $5,949,100 portion of the project not funded through Federal funds. This constitutes the above referenced 37 percent local/private match of total construction costs.

Previous Funding.—The project was allocated $1,5000,000 in the Transportation Equity Act for the 21st Century (TEA–21).

Commitment of other Funds.—The project is to be constructed concurrent with the development of adjacent property owned by Kaiser Ventures Inc. The project, known as the Kaiser Commerce Center, will provide additional infrastructure to supplement the interchange reconstruction. Of the Total $15,949,100 estimated cost for the interchange reconstruction, Kaiser Ventures and its development partners will provide the $5,949,100 portion of the project not funded through Federal funds.

PROJECT BENEFITS

The proposed development will transform a marginally productive site, formerly a portion of the Kaiser Steel Corporation steel mill facility, which is used now only for slag recycling, and sand and aggregate operations into a well balanced and carefully planned community of general and transportation related industrial, commercial and business park uses, which can take advantage of the site's excellent highway and rail access. Specifically the project benefits are:

—Increased safety for all motorists and trucks using this important interchange. The new design addresses the key existing deficiencies which have contributed to the increased traffic accidents and will alleviate the weaving and congestion associated with ingress and egress to I–10.

—The project site offers a unique location immediately adjacent to the interchange to the Interstate 10 and Interstate 15 freeways, both of which serve as major trucking gateways for goods entering California from the northern and eastern United States as well as the increased goods which are coming into this major distribution area as a result of the NAFTA legislation. A primary component of the Kaiser Commerce Center and Etiwanda Interchange reconstruction is the Truck Plaza. Located immediately adjacent to the Etiwanda Interchange, the Truck Plaza facility provides the needed services that long haul truckers

seek together with a secure place to obtain the needed rest to insure overall traffic safety on Americas highways.

—The project site also provides ready access to the two main rail lines serving Southern California, The BNSF and the Union Pacific, allowing for an efficient and economic use of existing rail service by the proposed project component of rail-served industrial uses. The close proximity to both major rail lines provides this location with the unique ability to facilitate the intermodal transportation objectives which were envisioned in the National Corridor Planning and Development Program and Coordinated Border Infrastructure Program. will provide the proposed rail-served businesses with an edge to obtain competitive rail shipping rates with timely and efficient access to that service.

—The proponents of the Specific Plan will expend private dollars of $5,949,100 to correct an existing traffic safety problem at the I–10 Freeway/Etiwanda Avenue/Valley Boulevard on- and off-ramps, in order to provide direct, and safe freeway ingress and egress from the Truck Plaza as well as the entire surrounding areas.

The project will create about 5,200 new, permanent jobs in San Bernardino County: up to 635 jobs at the Truck Plaza and adjacent uses; up to 2,328 jobs at the commercial/business park; and up to 2,326 jobs at the industrial area. In addition, about 1,284 temporary construction jobs will be created during the construction stage. The direct payroll benefit is projected to be $133 million. For every permanent job created within the proposed project site, it is estimated that an additional 0.80 jobs, or about 4,200 additional new jobs would be created in the County. The total payroll associated with the off-site, or indirect, jobs in estimated to be about $83 million per year.

The project will create a total of nearly 9,500 new jobs (direct and indirect, at fill build-out), in an area identified as a "job poor" economy, that is, the number of locally-based jobs is low given the number of local household requiring county residents to commute elsewhere for work. Given the County's current job deficit, it is anticipated that many of the newly created jobs will be filled by County residents who are either unemployed or who must commute to jobs outside of the County. The addition of almost 9,500 new jobs will increase the County's jobs/housing ratio; thereby improving its current "jobs poor" status. This opportunity for new job formation, together with the direct and indirect payroll benefits of over $217 million per year will have a dramatic positive effect on the local and regional economy.

PREPARED STATEMENT OF THE COLORADO DEPARTMENT OF TRANSPORTATION

Mr. Chairman and members of the subcommittee, I appreciate the opportunity to submit written testimony, as prepared by the Colorado Department of Transportation, to discuss important transportation issues in Colorado. It is with pleasure that I present to you our fiscal year 2001 transportation appropriation needs.

Our first priority is the Interstate-25 Broadway Viaduct Replacement Project. The interchanges and the bridges were constructed in 1951 and have never been upgraded. A critical component of I–25 reconstruction is the replacement of the viaduct over Broadway, a major Denver arterial, and the Union Pacific and Burlington Northern Santa Fe railroads. Over 50 freight trains a day pass under the viaduct and over 260,000 vehicles travel a day travel on the bridge. The project is nationally significant because all of the Rocky Mountain Region's north-south traffic, freight, truck and rail, are linked by this bridge. In addition, this viaduct and interchange are a vital connection for the Southeast Corridor Multi-Modal Project. Once completed, this project, along with the Southeast Corridor Multi-Modal Project, will provide an integrated system of moving people and goods through the southern corridor of Interstate-25.

The bridge can be reconstructed in three phases totaling $75 million. The first major phase will be the replacement of the I–25 viaduct over Broadway. Subsequent phases will complete reconstruction at the Broadway, Santa Fe and Alameda interchanges totaling $125 million. An appropriation of $20 million is requested for the Interstate-25 Broadway Viaduct Replacement Project for fiscal year 2001.

Our second priority is the Powers Boulevard Corridor in Colorado Springs. This 36-mile corridor will create a bypass around the eastern part of the city. It provides a direct connection to the Colorado Springs airport, as well as a vital link to five national defense facilities: the Air Force Academy, Fort Carson, Peterson Air Force Base, Shriever Air Force Base, and North American Defense (NORAD). Once completed the project will reduce traffic congestion on both Interstate-25 and the state highway system in that area. Even on the small portion of Powers Boulevard, which

has been constructed, daily traffic volumes have doubled over the past eight years with an average of 80,000 vehicles per day.

The overall cost of the Powers Boulevard Project is estimated at $650 million. Through its Strategic Transportation Investment Program, the Colorado Department of Transportation has committed $220 million through the year 2010. An appropriation of $10 million for completing a 6-lane section of the highway for three miles and the construction of a bridge is requested for the Powers Boulevard Project in fiscal year 2001. There will be savings generated by building six rather than four lanes now instead of later.

Finally, we are grateful for the $2.5 million in funding in fiscal year 2000 for the Traffic Operations Center. These funds are being used in start-up integration activities for the Interstate-25 Southeast Corridor Multi-Modal Project in Arapahoe County and for integration activities in Jefferson County. An appropriation of $5.4 million is requested for the construction of a Traffic Operation Center to benefit the people of Colorado and the transportation agencies across the state. The facility will be located in the Denver-metropolitan area.

For years the various agencies have attempted to coordinate daily emergency responses from a non-centralized site. The current practice of attempting to provide coordination has been difficult. The construction of a statewide Traffic Operations Center facility will have a significant impact on the coordination between agencies in the design, construction, operations and maintenance of transportation in Colorado. Increased coordination between agencies means lives are saved, traffic congestion can be reduced, and accident locations can be better identified. In short, the center will act as a primary facility to support Intelligent Transportation System services throughout the state.

Mr. Chairman and members of the subcommittee, we thank you for this opportunity to provide you with this written testimony regarding these significant Colorado transportation projects. We seek your support for our fiscal year 2001 Appropriation requests of $20 million for the I–25 Broadway Viaduct Replacement Project in Denver, the $10 million request for the Powers Boulevard Project in Colorado Springs, and the $5.4 million request for the construction of a Transportation System Traffic Operations Center as a part of Colorado's Intelligent Transportation System.

PREPARED STATEMENT OF THE SQUAXIN ISLAND TRIBE

The Squaxin Island Tribe of Washington State thanks the Senate Subcommittee on Transportation Appropriations for the opportunity to present written testimony regarding the need and use of funding within the Indian Reservation Roads Program. Having served two terms as Chairman of the Squaxin Island Tribe and in other elective positions over two decades, as an educator for 35 years, as a participant in numerous tribal negotiations since 1981, and currently as the Transportation Policy Representative for the Tribe and a Member of the TEA–21 Negotiated Rulemaking Committee, My testimony speaks to the enormous needs for transportation infrastructure improvements within Indian Country.

SUMMARY OF TESTIMONY

Funding for Indian tribes through the IRR program is completely inadequate to meet the needs of Indian tribes to develop transportation infrastructure that promotes economic prosperity on Indian reservations. Indian reservation roads continue to deteriorate at a rapidly increasing rate, because the IRR Program continues lag well behind state transportation programs in funding. This testimony is presented in three sections as follows:

1. General funding concerns regarding the IRR Program.
2. Specific funding concerns of the Squaxin Island Tribe regarding the IRR Program.
3. Recommendations for addressing general and specific funding concerns.

HISTORY OF THE INDIAN RESERVATIONS ROADS PROGRAM

1. Indian Reservation Roads: What are they?

The Indian Reservation Roads (IRR) are those public roads administered jointly by the Federal Lands Highways Office within the Department of Transportation and the Bureau of Indian Affairs within the Department of Interior. These roads comprise nearly 52,000 miles of roads providing access to or located within Indian reservations or other Indian areas. Approximately one half of the IRR System is com-

prised of state and county roads and the remainder are BIA or tribal roads maintained by the BIA.

2. Why are tribes interested in transportation?

Early in its history, the United States gave alternate sections of land to entrepreneurs to build the transcontinental railroad system. The land had been taken from Indian people and Indian tribes to fuel the economic expansion of a nation. In the state of Washington, as in much of the West, railroad companies became a thriving wood products industry, and names like Weyerhaeuser and Rayonier are remembered more for driving the timber-based economy of the Pacific Northwest for more than a century than for their railroad heritage.

Whether harvesting and transporting natural resources or extracting fossil fuels, the foundation of the national economy rests on lands once inhabited by Indian people. Trails and waterways established for eons and used for intertribal commerce became the principal routes for the national highway system and marine transport. Now, as tribal economies emerge and expand into new industries, existing transportation infrastructure will no longer suffice. Private sector investment in Indian industry requires that adequate investment be made in the transportation systems serving Indian lands.

3. How is the Indian Reservation Road System funded?

In fulfilling its trust responsibility under treaties with Indian tribes, the U.S. Bureau of Indian Affairs developed the Indian Reservation Roads System. With the 1982 passage of the Surface Transportation Assistance Act, the Federal Highway Administration initiated its administration of the IRR System and BIA roads became eligible for distributions from the Highway Trust Fund for the first time. Congress recognized that Indian people bought gasoline and paid gas taxes, but prior to 1982 received no benefit from the taxes paid. All subsequent surface transportation legislation adopted by the Congress authorized funding for the IRR System. Maintenance of the IRR System continues to be funded through the Department of Interior appropriations.

4. What funding has been available to tribes to improve the IRR System?

Prior to the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA), the maximum annual funding level for improvements to the IRR System was $80 million. ISTEA increased the funding authorization to $191 million and the Transportation Equity Act for the 21st Century increased it to $275 million. While these increases are substantial, not all of the funding is used to improve Indian reservation roads. In 1996, the last year of ISTEA, $167 million was distributed to BIA area offices for road design and construction. Bridge construction was funded by an additional 1 percent set aside for Indian tribes through the FHWA Highway Bridge, Rehabilitation, and Replacement Program. Under TEA–21, the Indian Bridge Program is funded within the IRR Program, and the HBRRP set aside no longer exists. A more substantial reduction results from the first-time application of obligation limitation to the IRR Program. For 1999, IRR funding authorization was reduced by $31.7 million under Sec. 1102(f) of TEA–21 and redistributed to the states at year end under Sec. 1102(d). FHWA and the BIA withheld 1.5 percent and 6 percent respectively for program administration.

Another two percent of the IRR funding is set aside for transportation planning by tribal governments. The net result of the takedowns is to distribute $203 million to BIA area offices for road design and construction from $275 million authorized. This represents a funding increase of 21.5 percent between ISTEA levels and TEA–21 levels, an increase that is less than one half of that experienced by state highway programs.

5. What level of funding is needed to improve and maintain the IRR System?

The BIA estimates its current construction needs inventory for BIA roads within the IRR System at $7.2 billion. This does not include the state or county components of the IRR System. Dirt roads comprise two-thirds of the BIA road system; of these, three-quarters are unimproved earth roads. The remaining one-third of the paved roads receives inadequate maintenance during their life cycle and are often reconstructed and resurfaced well in advance of their design life. Frequently, reconstruction and resurfacing occurs within seven or eight years of the original construction when this activity should occur no more frequently than every 10 to 15 years.

Road maintenance is currently funded through Department of the Interior appropriations, and the need to adequately maintain BIA-owned roads is estimated by the Bureau to be $100 million annually. Currently, the BIA receives only $25.5 million per year for road maintenance. This represents less than $500 per mile for the BIA roads within the IRR System. State highway agencies typically receive $4,000 to

$5,000 per mile for their road maintenance programs. Inadequate maintenance continues to plague the Indian Reservation Roads Program and result in premature deterioration of roads and inefficient and wasteful use of construction funding in rebuilding old roads rather than building new roads supporting emerging tribal economies.

UNIQUE CHALLENGES FACED BY THE SQUAXIN ISLAND TRIBE

1. The Squaxin Island Tribe, as is true for the majority of primarily small tribes, has not received a fair and equitable share of IRR Program funding.

As many as 350 tribes have received little or no funding for specific construction projects on or providing access to their reservation under the IRR Program. Only recently under ISTEA, did the BIA begin to provide funding for transportation planning to tribes so that they could develop transportation plans and improvement programs quantifying their relative need for transportation assistance. Even when funding was allocated to a tribe under one of the several formulas used by the BIA, tribes often did not receive funding for construction because they lacked the resources to identify a proposed project to the BIA. Since the inception of the IRR Program, the Squaxin Island Tribe has received funding to construct less than one-tenth of a mile of roadway in 1982. Funding was awarded through a "638" contract in 1999 to construct another two-tenths of a mile of roadway in 2000. Although the formula allocation for the Squaxin Island Tribe totaled $360,000 under ISTEA between 1992 and 1997, the Tribe received only $12,400 for a small chip-sealing project during the entire authorization period. The Tribe is currently trying to secure IRR Program Funding to design and build a half-mile access road to a planned 36-unit housing development. Multiple layers of federal agency oversight and other bureaucratic delays potentially jeopardizes more than $2 million in federal, state, and Tribal funding commitments for the project.

2. The majority of the IRR System for the Squaxin Island Tribe is comprised of state and county roads providing access to the Squaxin Island Reservation.

The IRR System for the Squaxin Island Tribe includes 3.7 miles of BIA roads built by the Tribe with funding from sources other than the BIA, and 78.3 miles of county and state roads providing access to the Squaxin Island Reservation. While the state roadways serving the Reservation are generally well maintained, county road maintenance is less certain and these roads are often at the bottom of county priority lists for improvements if they are listed at all. Fortunately, the Tribe and Mason County have developed a positive working relationship over the past several years, and the Tribe secured 1997 Highway Bridge Replacement and Rehabilitation Program (HBRRP) funding on behalf of Mason County to rehabilitate an 80-year old bridge on the primary access route to the Reservation. Because of the tribal contribution for the bridge, Mason County is now proceeding with design to reconstruct one mile of substandard roadway that includes the bridge project. The combined projects represent a match of local to federal funds of better than five to one. Although this type of project collaboration is possible between tribes and other governments within the IRR program, this particular project has taken more than five years to bring to fruition, and yet construction is not anticipated to start for another one and one-half years.

3. Being located in a suburban area of Washington state, the Squaxin Island Tribe faces transit issues that the IRR Program is ill prepared to address.

An extreme housing shortage on the Squaxin Island Reservation forces many Tribal members to live some distance from the Reservation. Those without dependable personal transportation are dependent on public transportation to access employment, schools, medical care, and other Tribal services. Without reliable transportation, these Indian people are unable to use the services provided by the Tribe or to access employment opportunities. Because of the number of Tribal members finding themselves in this situation, the Squaxin Island Tribe has developed a public transit system in partnership with the state of Washington and the Mason County Transit Authority (MCTA). The Tribe has initiated transit service with its one 15-passenger bus and has built a transit station adjacent to U.S. Hwy. 101. The transit station is used extensively by the Tribe with three daily stops and MCTA with 16 scheduled daily stops. No IRR funding or other federal funding has been used by the Tribe to develop or operate its transit service. Because of the inadequate funding within the IRR Program relative to the construction need, the IRR Program generally has not funded transit projects. There also are no direct Federal Transit Administration Programs for tribal transit systems.

RECOMMENDED APPROPRIATIONS TO CORRECT DEFICIENCIES IN THE IRR PROGRAM

1. In the short term, use part of the $3.0 billion in unplanned gas tax collections not anticipated when TEA–21 was passed to increase appropriations to the IRR Program.

Both the Administration and several United States Senators (see attached White House Senate Plan, American Indian Programs for fiscal year 2001 dated January 12, 2000 and distributed on January 24, 2000) propose to increase funding for the IRR Program above fiscal year 2000 levels by $117 million to $392 million. The Squaxin Island Tribe requests that beginning in fiscal year 2001, funding to the IRR Program be increased by $117 million to $392 million.

2. In the long term, work to achieve funding parity between state highway programs and tribal road programs.

Indian reservation roads make up 2.63 percent of this nation's public highway system; yet, less than one percent of the annual allocations for the highway program are directed at providing transportation assistance for Indian reservation roads. The Squaxin Island Tribe would like to see IRR program funding increased to levels comparable with the states. Repealing the provisions of TEA–21 that applied obligation limitations to the IRR program for the first time is one way to increase direct funding to tribal transportation programs without additional appropriations. Unlike state programs, the IRR program does not recover obligation limitation takedowns when those funds are redistributed.

3. Boost Interior appropriations for road maintenance.

On the Squaxin Island Reservation, many roads are approaching 25 years since original construction, but have never received maintenance, reconstruction, or resurfacing by the BIA. The Squaxin Island Tribe requests that Congress increase Department of the Interior appropriations for road maintenance to $100 million annually to address the deplorable condition of Indian reservation roads.

4. Appropriate separate funding for transportation planning and capacity building to enable all tribes to participate in the IRR Program.

Although the BIA is authorize to allocate at least 2 percent of the IRR construction program appropriations for transportation planning, for several BIA Regional Offices that level of funding is inadequate to provide for transportation planning of all the tribes in the region on an on-going basis. For the Northwest Region, less than $250,000 is all that is available for the region's 44 tribes. Develop a set aside program for transportation planning and capacity building similar to the concept of minimum apportionment employed by the states for nearly every Highway Trust Fund program allocation formula.

On behalf of the Squaxin Island Tribe, I thank this Subcommittee for allowing me the opportunity to submit written testimony on TEA 21—a topic which will greatly impact the future, not only of my Tribe but all Tribes, and our accessibility to others as well as our accessibility to each other.

PREPARED STATEMENT OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION

The New York State Department of Transportation (NYSDOT) appreciates the opportunity to present testimony on the fiscal year 2001 transportation appropriations. New York has a truly intermodal transportation system. NYSDOT has responsibility for a $1.6 billion annual highway construction program, and a $1.6 billion annual transit operating and capital assistance program. NYSDOT is currently completing implementation of a balanced multi-year highway and mass transportation capital programs valued at $24 billion, with each mode receiving nearly $12 billion in Federal and State funds, and is now developing a new comprehensive program to address the State's needs for the next five years. In addition to highways and transit, as part of a larger plan, NYSDOT is working in partnership with Amtrak to invest up to $185 million in the State's passenger rail system over the next five years to upgrade to 125 mph high speed rail service. New York State is also undertaking an $80 million freight and passenger rail investment program, and, over the past five years, has provided over $100 million in assistance to commercial service airports to fund terminal and infrastructure improvements.

In New York State, we have made a strong commitment to our transportation systems. Federal funds comprise about 40 percent of New York State's highway funding and 25 percent of transit capital spending, making us one of the highest self-help states in the nation. Despite these investments, New York's infrastructure, typical of the Northeast, is older than most, very heavily utilized and in need of mod-

ernization to attain the standards of other regions in the nation. We need your continued support in securing Federal assistance, which is so vital to our ability to meet our transportation needs.

In developing the fiscal year 2001 Transportation Appropriations, we ask that you consider our views in the following areas:

Preserve the Structure and Intent of TEA–21

The Transportation Equity Act for the 21st Century (TEA–21) is a carefully crafted bi-partisan agreement that was completed just two years ago. TEA–21 struck a delicate balance between the needs of highways and transit. Further, the bill reflects the results of several years of negotiations over the distribution of Federal funds to the states. Last year, during the appropriations debates, several proposals were put forth that would have upset these hard-fought funding formula agreements, threatening the integrity of TEA–21. New York strongly supports TEA–21 and believes that the consensus reached in this bill, which provides stability to state and local transportation planners, should be honored. We urge you to maintain the structure and intent of TEA–21 by rejecting provisions that would modify TEA–21.

Support Funding for Transportation Programs at the Levels Authorized in TEA–21

TEA–21 provides for historic levels of investment in our surface transportation systems, recognizing the critical role that infrastructure plays in the nation's economic health and growth. Yet even with these significant investments, the United States Department of Transportation estimates that billions of dollars in annual needs will remain unmet.

TEA–21 guarantees that money paid into the Highway Trust Fund will be used for surface transportation improvements, and provides additional general fund authorizations. New York is pleased that Congress has made this commitment to our nation's infrastructure, and asks that you appropriate funds for transportation programs at the maximum levels authorized in TEA–21.

Support Full Funding for TEA–21's Transit Projects & Programs

New York State is pleased that Congress recognized the critical importance of transit to the nation by providing significant increases in transit funding in TEA–21. In New York State, transit provides a lifeline to millions of riders each day, from the very urban areas like New York City to the smallest upstate communities. Public transportation in New York State accounts for nearly one-third of all transit trips in the nation. Each day, more than 25 percent of New Yorkers across the State use public transportation to travel to work—the highest transit share in the nation.

New York State has an historic and continued commitment to public transportation funding. New York State provides over $1.6 billion each year in operating assistance to our transit agencies. Additionally, more than 70 percent of the State's transit capital investment is from non-Federal sources. Even with this commitment, New York State will be unable to advance critical New Start and bus initiatives without Federal support, as provided in TEA–21.

New Starts—Long Island East Side Access Project.—New York State is pleased that Congress recognized the importance of New York's Metropolitan Transportation Authority's (MTA's) Long Island Rail Road (LIRR) East Side Access project in TEA–21 by authorizing a minimum of $353 million for the project. In addition, TEA–21 designates that this project be given priority consideration for funds made available under the FTA New Start program. New York supports the MTA's request for $198 million for this project in fiscal year 2001.

The Pennsylvania Railroad Station is the busiest train station in North America, serving a train per minute during rush hour, and carrying approximately 140,000 Amtrak, Long Island Rail Road and New Jersey Transit passengers every weekday morning. Currently, there is significant crowding at the station. The LIRR East Side Access Project will dramatically reduce crowding in Pennsylvania Station by providing one seat service from points on Long Island to East Midtown. This project will increase ridership by an estimated 109,000 weekday passengers, and save 5.3 million hours of travel time annually for commuters. Further, the project will allow full utilization of the significant Federal investment already made in the 63rd Street Tunnel, and provide a stimulus for economic growth and development. On March 6, 2000, the Federal Transit Administration transmitted to Congress, as required by law, its recommendations for the allocation of funds for new fixed guideway systems and extensions ("New Starts") for fiscal year 2001. In its report, the FTA recommended the LIRR East Side Access project for allocation of New Starts funds. We urge you to honor the commitment made in TEA–21 and support New York's MTA's request of $198 million for this critical project.

Bus & Bus-Related Requests.—New York State has submitted requests for funds to support critical bus and bus-related initiatives throughout the State. We ask you

to consider funding these projects which will provide valuable assistance in improving and expanding transit facilities and replacing over-age buses with newer equipment that will be ADA accessible and utilize new cleaner burning fuel technology. In addition, TEA–21 provided several authorizations subject to appropriations to support projects in New York State communities. We ask that you support New York's request to fully fund these authorizations.

Fully Fund the Aviation Investment and Reform Act for the 21st Century (AIR–21)

New York congratulates Congress on passage of the landmark AIR–21 legislation and requests support for sufficient budget authority and outlays to fully fund AIR–21, including general fund contributions to ensure adequate resources to fully fund FAA operations.

Resist Earmarking of USDOT Discretionary Programs

TEA–21 created several new and important programs including the $700 million Coordinated Border Infrastructure and National Corridor Planning & Development programs (Border/Corridor programs), the $120 million Transportation & Community & Systems Preservation Pilot Program (TCSP), the $1.0 billion Clean Fuels program, and the $750 million Jobs Access and Reverse Commute program. In fiscal year 2000, these programs were extensively earmarked. We ask that you provide full funding for these programs, and allow for competitive selection of grant recipients as provided in TEA–21.

Provide Adequate Funding for US Customs on the Northern Border

The United States and Canada have the largest bilateral trading relationship in the world. In 1995, there was $272 billion in total merchandise trade, exceeding U.S. trade with the entire European Union ($256 billion) and more than double U.S. trade with Mexico ($110 billion). One-third of the value of imports from Canada to the US and 20 percent of the exports from the United States to Canada are carried by New York State's transportation infrastructure and across New York's border with Canada.

While billions in transportation infrastructure needs have been identified along the border between Canada and New York alone, even if all these transportation needs are met, until there is adequate staffing by Federal agencies at the border with adequate systems support, there will be significant congestion at the border. New York was pleased to learn that, due in large part to the efforts of Congressman McHugh, staffing will be increased at the northern border. New York urges Congress to provide funds to increase U.S. Customs staffing at the United States-Canada border in fiscal year 2001.

Further, New York supports full funding for Customs automation, including the Automated Customs Environment. New York opposes establishment of a user fee to raise the funds for this project. The current Automated Commercial System has failed several times recently, and can no longer accommodate peak volumes of entry transactions. Replacement of this antiquated system will eliminate a major technical impediment to the further development of innovative technologies such as the Peace Bridge Electronic Commercial Vehicle Crossing System, for which New York received a $1.8 million grant from the 1999 TEA–21 Border/Corridor programs.

Support Intercity Passenger Rail and Full Funding for High Speed Rail Programs

Intercity passenger rail is a unique asset critical to the mobility and economic well being of New York State and the nation. New York thanks the subcommittee for its past support of Amtrak and High Speed Rail investment, and urges your continued support of Amtrak in fiscal year 2001 at a level equal to Amtrak's fully authorized level. This assistance will help Amtrak continue its progress on the glidepath to operating self-sufficiency by 2002, and make investments critical to the future of a viable national passenger rail network.

Intercity passenger rail service investments beyond Amtrak capital assistance are also important. TEA–21 continues several programs that provide funding for High Speed Rail projects, including the Next Generation High Speed Rail program, and the program to eliminate highway-railroad grade crossing hazards in designated high-speed rail corridors, including the Empire Corridor in New York. New York urges your support of these programs.

New York State is committed to improving passenger rail service within the State and implementing High Speed Rail service in an incremental and achievable manner. While New York State is working with Amtrak to invest up to $185 million in the State's rail system over five years to provide faster, more convenient passenger train service between New York City and Buffalo, this partnership is only part of a larger $315 million high speed rail plan. New York State is actively pur-

suing several important rail projects pursuant to our larger high speed rail plan that are not funded within the Amtrak Memorandum of Understanding.

New York State is seeking support for a comprehensive grade crossing risk reduction program along the high-speed Hudson Line of the Empire Corridor between Schenectady and New York's Pennsylvania Station. This program includes grade crossing eliminations, separations and high technology improvement projects to assist in bringing speeds to 125 mph. We are also seeking funding for two rail-related studies (a High Speed Rail Program Station and Land Side Access Study and an Advanced Train Control Study) to further progress work in the Corridor. These important projects will complement our historic funding agreement with Amtrak, increase safety in the corridor and improve our ability to implement high-speed service. We ask your support in securing funding for these important initiatives.

NYSDOT thanks you for this opportunity to present testimony. We appreciate your dedication to and support of the nation's transportation systems.

FEDERAL RAILROAD ADMINISTRATION AND AMTRAK

PREPARED STATEMENT OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

The North Carolina Department of Transportation (NC DOT) would like to thank the subcommittee for its strong continuing support for the nation's transportation system in general and transportation investments in North Carolina in particular. Three central organizing principles govern our approach to the provision of transportation services: safety first, efficiency, and partnerships.

Rail services are an integral part of our statewide, intermodal system. With a rising population and growth of highway and air traffic in the state, rail is increasingly important as an alternative to auto and air transportation for both freight and passengers.

The state of North Carolina sponsors two Amtrak-operated trains, the Piedmont and the Carolinian. The Carolinian began operation in 1990 and the Piedmont in 1995. The Piedmont makes a daily round trip between Raleigh and Charlotte. The state owns the equipment for the Piedmont and contracts with Amtrak for maintenance and operations of the train. The Carolinian makes one daily trip each way between Charlotte and New York City. The Carolinian uses Amtrak equipment and is Amtrak-maintained. The NC DOT reimburses Amtrak for the instate prorated portion of Amtrak administrative, operating, station and other costs in excess of passenger and miscellaneous revenues generated by the Carolinian.

The state of North Carolina owns both the North Carolina Railroad and the stations served by both trains. The state recently purchased the minority shares in the NCRR for $72 million.

Both trains are experiencing significant growth in readership. The Piedmont service, in particular, posted the second highest percentage increase among Amtrak trains during the first quarter of fiscal year 2000 (October-December 1999). The Piedmont's ridership grew 22.2 percent when compared to the first quarter of 1999. The Carolinian experienced a healthy 5.3 percent increase over the same period of time.

Other Amtrak intercity passenger trains providing service to North Carolina are the Crescent, Silver Star, Silver Meteor, and Silver Palm. The Crescent provides service from New York City, Philadelphia, Washington, D.C. through Greensboro, Charlotte and on to Atlanta and New Orleans. The Silver Star takes passengers from New York City, Philadelphia, Washington, D.C., through Rocky Mount, Raleigh and on to Columbia, Savannah, Jacksonville, Orlando, Tampa and Miami. The Silver Meteor provides service from the Northeast Corridor through Rocky Mount, Fayetteville and on south. The Silver Palm provides service from New York to Miami with stops in North Carolina to Rocky Mount, Wilson and Fayetteville.

Safety is our most important concern. In North Carolina there are 5,000 public grade crossings and over 3,000 route miles. There are an additional 5,000 private grade crossings in the state. In order to increase train speeds and thereby reduce travel times, the overall number of grade crossings must be rationalized.

Grade crossing safety and elimination are part of the development of the Southeast High Speed Rail Corridor (SEHSR) between Washington and Atlanta. The SEHSR Coalition's Report A Time to Act, released by the Governors of Virginia, North Carolina, South Carolina, and Georgia on February 29, 2000, specifically supports this vital effort. (Copies of the report were provided to you and your staff under separate cover.)

In this regard, we value your investment of High Speed Rail Grade Crossing Improvement Program funds (section 1103c) in the SEHSR Corridor. North Carolina

has joined with our partners in a joint request for continued funding in our four states. Because we are increasingly one corridor from Washington to Atlanta, the federal share reaps a much higher return on investment. In addition, we value our partnership with the North Carolina Railroad, CSXT, Norfolk Southern and Amtrak, which make these vital projects possible. We strongly encourage your investment of $1 million in North Carolina and we support the requests of our partners.

The NC DOT Rail Division has recently doubled the number of staff in this critical area. Further, we have reorganized the administrative responsibilities to ensure better delivery of the product-safety.

In order to improve the efficiency of the intercity passenger rail system we encourage you to continue investment in the development of the non-electric locomotive. The program promises to have broad benefit to the Nation as a whole and North Carolina and the SEHSR Corridor in particular.

We recognize that the state of North Carolina has a strong responsibility to our federal state partnership. Most recently the state worked with the North Carolina Railroad on a $48 million capital investment program. We are currently working with the NCRR and Norfolk Southern on another list of improvements.

We support Amtrak's request for $521 million to continue on its "glide path" to operational self-sufficiency. Should additional general revenues be available to fund a greater portion of Amtrak's authorization, we would suggest that the funds be used for life and safety improvements on designated corridors. In this regard, we value the testimony of the US Department of Transportation's Inspector General. Penn Station New York is the most popular destination for North Carolinians.

Notwithstanding these significant fire and safety needs, modest capital investments in adjacent corridors like the SEHSR Corridor could reap benefits as well. Should scarce, additional funds be available, please continue your practice of equitably considering all requests. For example, an investment of $5.3 million in North Carolina would allow the acceleration of our nationally recognized grade crossing elimination program through the closing of a serious grade crossing between Greensboro and Raleigh. This line is used by 44 freight trains and 6 passenger trains daily.

More than ever the Subcommittee faces serious challenges and constraints. Again, we value your support for a national system. Thank you for your consideration of our request.

PREPARED STATEMENT OF THE COALITION OF NORTHEASTERN GOVERNORS

The Coalition of Northeastern Governors (CONEG) wishes to thank Chairman Shelby and Ranking Member Lautenberg for the opportunity to provide this testimony regarding the fiscal year 2001 U.S. Department of Transportation (U.S. DOT) Appropriations. The subcommittee plays a critical role in providing investments in the nation's vital intermodal transportation system. The Governors commend the subcommittee's efforts to provide increased levels of funding for highways and transit in the fiscal year 2000 U.S. DOT appropriations, and urge continued support in fiscal year 2001 to the levels authorized in the Transportation Equity Act for the 21st Century (TEA–21). We also urge the subcommittee to continue the important federal partnership role in strengthening the nation's passenger and freight rail systems through continued investments in rail safety and capital investment in Amtrak and other critical rail projects. Continued federal investment in transportation research and development is also an essential element of public and private efforts to enhance the safety and capacity of the nation's transportation system.

An integrated, safe, and fully-funded national surface transportation system is critical to the economic, social, and environmental well-being of the Northeast region and the nation. The safety, preservation, and efficiency of the region's transportation assets are primary concerns of the Coalition of Northeastern Governors. As the subcommittee considers the fiscal year 2001 appropriations for the Department, the Governors urge the subcommittee to support transportation investments which have national and regional significance. These investments, implemented in conjunction with state-federal partnerships, contribute to a vibrant economy and improved quality of life for the Northeast and the nation.

INVEST IN SAFETY

Safety on the nation's highway, transit and rail systems continues to be a priority for the Governors. Support for a strong federal-state partnership to correct hazardous conditions on the nation's highway infrastructure and to undertake proactive measures which improve highway safety is critical to reducing injuries and deaths on the nation's highways. Continued support is also critical for successful programs

that contribute to a reduction in the number of highway-rail crossing fatalities. Examples of these programs include grade crossing improvements and education programs such as Operation Lifesaver. As travelers throughout the nation seek alternatives to congested highways, the Governors also strongly support full funding for advanced development of high speed rail corridors by eliminating highway grade crossing hazards, as provided in Section 1103(c) of TEA–21. One example of important steps being taken to make passenger rail travel safer is the successful demonstration of the nation's first quad-gate technology by the Federal Railroad Administration and the Connecticut Department of Transportation, and the movement to install this technology at other grade crossings.

FULL FUNDING OF HIGHWAY AND TRANSIT PROGRAMS

With increasing traffic volumes on the region's highways, the Governors support funding of highway programs to the levels authorized in TEA–21. This increased investment by the federal, state and local governments is beginning to show results in improved conditions, performance and safety of the region's and nation's highways and bridges. The Northeast, with its extensive, heavily used and aging highway infrastructure, has unique transportation needs. As a region which serves as a global gateway and important consumer market for the entire nation, investment in our highway system helps the region remain competitive in the international marketplace by facilitating the seamless flow of people and commerce.

The Governors also urge full funding for the transit programs at the levels authorized in TEA–21. Transit plays a vital role in the lives of millions of residents in urban, suburban, and rural areas of the Northeast. It significantly decreases congestion on roads in metropolitan and suburban areas, mitigates isolation in the region's more rural cities and towns, and brings environmental benefits to the entire region by saving fuel and reducing air pollution. Transit is also the critical link in the region's Jobs Access and reverse commute programs.

In the Northeast, as well as across the country, transportation is a vital tool for economic development. Investments made possible by federal, state and local government and the private sector partnerships fostered by TEA–21 are enriching our communities by creating and preserving jobs, enhancing global competitiveness, and contributing to improved air quality and overall quality of life. Adequate funding levels and flexible use of transportation funds are important to the emergence of innovative intermodal solutions which can alleviate congestion, improve capacity and encourage seamless movement of passenger and freight traffic.

CONTINUE CAPITAL INVESTMENT IN INTERCITY PASSENGER RAIL

Intercity passenger rail makes a unique contribution to the complex fabric of the nation's transportation network. This is particularly true in the Northeast where the region's passenger and freight rail networks are critical assets for the region's economy. If the national intercity passenger rail system is to maintain a safe, efficient network and realize its potential to improve the overall transportation capacity, its extensive capital needs must be addressed. The Governors wish to thank the subcommittee for the funding provided for Amtrak in fiscal year 2000, and urge that Amtrak be funded at its fully authorized level in fiscal year 2001. This increased federal funding, in combination with the significant capital investments being made by state partners, is vital to the future of intercity passenger rail service throughout the nation.

Northeast Corridor Fuels Passenger Rail Development.—The Northeast Corridor is the financial linchpin in the national intercity passenger rail network. Ridership and revenues from the Northeast Corridor service provide essential financial resources used by Amtrak to maintain and expand the entire intercity passenger rail system. Therefore, it is vital that the level of federal capital funding for Amtrak is adequate to ensure the integrity and efficiency of this regional and national transportation asset. Investment by Amtrak, in partnerships with state, commuter and freight users, is urgently needed in such critical projects as life and safety improvements in Pennsylvania Station New York and infrastructure maintenance throughout the Northeast Corridor network.

Growth of Passenger Corridors.—Throughout the nation, states and communities are stepping forward to work with the federal government and private sector to bring about modern, efficient passenger rail service. In addition to the Northeast Corridor, the region's rail system supports important passenger and freight service to communities and businesses. Recognizing the importance of this broader network, the Governors support a strong federal commitment and financial participation in federal-state-private sector partnerships which are working together nationwide to provide high speed rail service in such corridors as the Empire, Keystone, and

Southeast; to improve service in Vermont; and to restore service from Maine to Boston with stops in New Hampshire.

INVEST IN RESEARCH AND DEVELOPMENT

In many congested areas of the country, expanding existing or building new infrastructure is not an option. Technology can greatly enhance the safety and capacity of the existing highway and transit systems. Federal support and investment are pivotal to state and regional deployment of advanced transportation technologies. The Governors support full funding for research and development, specifically the Federal Railroad Administration's Next Generation High-Speed Rail programs which continue to make a valuable contribution to the development of the next generation non-electric locomotive. Intelligent Transportation System (ITS) research and deployment, particularly through institutions such as the I–95 Corridor Coalition and projects such as the northern New England development of a regional intelligent transportation system for rural areas, can effectively increase the safety and mobility of the regional transportation system and lead to economic development

The CONEG Governors thank Chairman Shelby, Ranking Member Lautenberg, and the entire subcommittee for the opportunity to present this testimony. We appreciate your dedication and support for the Nation's transportation investments.

PREPARED STATEMENT OF THE HIGH SPEED GROUND TRANSPORTATION ASSOCIATION

We thank the Subcommittee for the opportunity to testify regarding the fiscal year 2001 Transportation Appropriations bill. This Subcommittee has been very supportive of the various rail initiatives of the past few years and both the rail capital and rail safety programs have greatly benefited from that support.

As you may know, the High Speed Ground Transportation Association is made up of many parties interested in advancing high speed rail in the United States. We now have over 800 members representing a broad cross-section of private and public entities in the 48 contiguous states and Alaska. Our members include industry suppliers, engineers, transportation consultants, unions, rail operators, utilities, public officials and members of the public. Our advocacy on their behalf falls into three major areas:

—Adequate and appropriate continued funding of Amtrak and the programs of the Federal Railroad Administration

—Creation, funding and construction of high-speed rail corridors throughout the country

—Deployment of Maglev rail technology in the United States.

Before commenting on the proposed budget for fiscal year 2001, some overview of the current status of the programs mentioned above is required. In all of these areas, the situation is changing very rapidly, probably more so than most thought as little as five years ago. The structure of the TEA–21 legislation has quickly produced an extremely energetic effort on the part of the States and metropolitan areas to begin viewing rail options in transportation on a par with traditional highway and airport programs. More and more, rail options are being included in thinking and plans for integrated transportation systems, particularly in the large urban centers of the country. There is a recognition that highway lanes, airspace and landing slots are limited or extremely costly. The existing rail rights of way and emerging technologies in rail have yet to be exploited to a large degree. Contending with the current spike in oil prices and an oil market that is reliable only in its constant fluctuation, has lent greater support for decreasing US dependency on oil in our transportation alternatives. Increasingly, rail options are being considered as an answer to continued public demand for fast, efficient and safe transportation.

There is little doubt that rail ridership is on the rise and that if we can bring higher speeds and safe service to the public, ridership will go up even more. Amtrak reports total ridership for fiscal year 1999 at 21 million, up 10 percent since it began rebounding three years ago. With the advent of high speed rail corridors envisioned in TEA–21, there has been an explosion of interest and commitment on the part of the States to move forward towards deployment of higher speed rail systems. For example, the Midwest Regional Rail Initiative, comprised of nine state Departments of Transportation, represents a cooperative and ongoing effort to develop an expanded and improved rail system in the Midwest. Midwest state legislators have also combined to form a Midwest High Speed Rail Compact to demonstrate their dedication to developing passenger rail. And Wisconsin Department of Transportation Secretary Terence Mulcahy has formed a coalition, States for Passenger Rail, garnering members from 17 states around the nation, to urge federal funding of regional passenger rail initiatives.

The Midwest is only one among many regions actively pursuing expanded passenger rail. California, with a projected population of 50 million people by 2020, is planning the most ambitious high speed rail system in the nation: a 700-mile system spanning the state from Sacramento to San Diego. 64 percent of Californians support the plan and the ¼-cent sales tax that would help to fund it. The Southeast is another region with significant state support for passenger rail. The Virginia State legislature authorized $76 million in its budget for funding passenger rail projects. North Carolina also approved $66 million for passenger rail funding.

These are but a few examples of the strong state interest throughout the nation for high speed rail. In addition, there has been a robust response to the TEA–21 Maglev deployment program. There are seven Maglev proposals from around the country undergoing the FRA review process that has been set up. The energy and enthusiasm behind the proposals are impressive and the federal funds committed up to now have been fully matched by the sponsors. On June 30th, detailed plans, both physical and financial, are due from the sponsors to the FRA. We believe these plans will be exciting and innovative in their scope and concept and may well spark additional proposals from other parts of the country.

In light of this movement from around the country, we need to cast a critical eye toward the proposed budget and the future to make sure we are headed on a path that is rational, realistic and that will best serve the public.

AMTRAK

Amtrak is undergoing a significant turnaround as a result of its new leadership team's strategic business plan focused on achieving operational self-sufficiency and building a truly commercial enterprise. In 1999, Amtrak achieved record revenues of $1.8 billion including a 32-fold increase in revenues from the express business. Commercial ventures achieved a record profit of $108 million. All of this contributed to Amtrak beating its bottom-line targets for the second straight year.

Amtrak has continued its aggressive business-like approach to providing passenger rail service through several key programs: (1) the implementation of an industry-leading service guarantee program; (2) expansion of the national network to grow market share and improve financial performance (the recently announced Network Growth Strategy); and (3) the introduction of the Acela high speed service in the Northeast Corridor.

Amtrak has requested $989 million for fiscal year 2001: $521 million would provide the base level of capital support required to keep Amtrak on the path to operating self-sufficiency, and $468 million would provide critically needed capital investment funds for the development of high speed corridors all across the country. The Administration also recommended $989 million for passenger rail funding: $521 million for Amtrak's basic capital needs, and $468 million in a separate account for intercity passenger rail improvements. The Association strongly supports the total amount of funding requested by both Amtrak and the Administration, $989 million, for investment in passenger rail. These funds are absolutely critical to making progress to reach higher speeds along emerging high speed corridors around the country.

We would like to note that the Administration has proposed shifting $468 million from Revenue Aligned Budget Authority (RABA) to fund their proposed separate account for intercity rail improvements. In order to make such a shift, a change in the authorizing law would be required. It is unclear at this time whether an authorizing bill contemplating such a change will come to the floor of the House or Senate this year. The same amount of funding could be realized simply using the existing Amtrak authorization.

NEXT GENERATION HIGH SPEED RAIL

The Administration has proposed $22 million for continued development of high speed technologies. The authorized level for these programs is $35 million. $25 million of this amount is authorized for technology. $10 million is authorized for pre-construction activities.

In addition, the Administration has proposed the $468 million for intercity rail improvements mentioned above.

Once again, the Association strongly urges the appropriation of the $468 million recommended by the Administration to assure the continued development of next-generation high speed rail. The $35 million authorization called for in TEA–21 for technology and pre-construction activities is insufficient to meet the strong demand for next-generation high speed rail in this decade. Transportation planners estimate that the planning, development, construction and equipment purchases for high speed rail corridors will require upwards of $17 billion over a ten year period. This

is less than half of what the federal government will spend on highways and aviation this year and, of course, hefty increases are planned for future years, especially in aviation. The $17 billion would produce incremental, but important, improvements to achieve moderate successes in speed. For very high speed rail projects, such as the one contemplated in California, heavier investment is essential. These are wise investments that will yield numerous benefits (a cleaner environment, most importantly) and cost savings (increased efficiency and productivity due to decreased congestion) down the line.

GRADE CROSSING IMPROVEMENTS

The $5.25 million guaranteed funding for this program barely scratches the surface of funding needs. We ask the Subcommittee to reassert its dedication to grade crossing safety by approving a sustained program of funding to eliminate or improve every grade crossing along the designated high speed rail corridors.

MAGLEV

Maglev may hold out the most exciting promise for high speed ground transportation. The advanced technology behind Maglev, allowing for travel speeds only imagined a few years ago, could change the way people move in the 21st century. The public-private partnerships that will build and operate the Maglev systems may set a new direction for how transportation infrastructure is financed and delivered in the future.

The Administration has proposed fully funding the "guaranteed" portion of the Federal Aid Highways program that includes $25 million for the Maglev deployment program. While this is the fully funded amount envisioned in TEA–21 under the guaranteed funding, it is insufficient to fully evaluate the seven projects around the country. That is why HSGTA asks the Subcommittee for the guaranteed $25 million, and an additional $30 million for completion of the seven projects' Environmental Impact Statements.

The Maglev deployment program is quickly reaching a crossroads where decisions have to be made about its long term future and potential. It has become evident that there is great interest among the sponsors to continue to move forward. While final results of current planning work are not yet in, it is clear that at a minimum two or three, and perhaps all, of the projects competing for federal funding assistance will offer a successful demonstration of this exciting new technology. It appears evident that the $950 million in non-guaranteed funding will not in large part be appropriated during the TEA–21 funding cycle. This is due to budget constraints on the Subcommittee's 302(b) allocation. It also seems unlikely that actual construction of one or more projects can begin by fiscal year 2003. With both of these factors at work, it is clear that long-term decisions about Maglev deployment will be made in the next authorization bill.

In the interim, we urge the Subcommittee to consider the following alternative to allow the authorizing committee to make the best informed decision possible and to best protect the sponsor's and Federal government's investment up to this point. That investment will be well in excess of $100 million by the end of fiscal year 2001.

The Maglev sponsors will submit their detailed plans to the Federal Railroad Administration on June 30, 2000. While we expect these plans to be thorough, both the sponsors and the Federal government can make better investment decisions if a full Environmental Impact Statement (EIS) can be developed for each of the projects. Informally, we have estimated the federal share of this stage of the program to be between $42–$47 million to cover all 7 projects. The guaranteed portion of Maglev funds for fiscal year 2001 is $25 million. We understand that takedowns and obligation limitations required by law may reduce this amount to $17 million actually spent in fiscal year 2001 on the program. This would leave a gap of approximately $30 million to cover the costs of full EIS's for the projects. Matching funds naturally cover some portion of this figure.

Additional necessary funds can be appropriated from the $950 million authorization in TEA–21. The additional funds are a small amount in absolute terms, and tiny when compared to the size of the investment we have made already and the size of the investment in the future. It is an extremely prudent hedge against poor decision making in the future and will assure a complete picture for those who will be making long-term decisions on the program during reauthorization.

Our estimate of these costs is our own. The Federal Railroad Administration and seven project applicants could probably develop a sharper figure on EIS costs. The important principle involved is that the Congressional intent to deploy Maglev technology in this country, as expressed in TEA–21, be fully realized and that maximum information be available before a multi-year commitment is made on how this pro-

gram can best move forward. We hope that you will agree with us that this is the prudent course of action.

PREPARED STATEMENT OF THE ATLANTA-CHATTANOOGA MAGLEV CONSORTIUM

The Atlanta-Chattanooga Maglev Consortium thanks the Subcommittee for this opportunity to testify regarding the fiscal year 2001 Appropriations bill. This Subcommittee has been very supportive of the various rail initiatives of the past few years for both rail capital, safety and development initiatives. The Atlanta-Chattanooga Maglev initiative has considerably benefited from that support. We need continued support for fiscal year 2001.

The Atlanta-Chattanooga Maglev Consortium's steering committee consists of the following members: 1. Atlanta Regional Commission; 2. Georgia Department of Transportation; 3. Georgia Regional Transportation Authority; 4. Georgia Department of Transportation; 5. Georgia Rail Passenger Authority; 6. The Chattanooga Institute; 7. The City of Chattanooga; 8. Coosa Valley and North Georgia Regional Development Centers; and 9. Cobb County Department of Transportation.

The ongoing Atlanta-Chattanooga Maglev Deployment study is one of seven being conducted simultaneously in the United States to determine which location(s) would best showcase Maglev technology in this country. The transportation corridor to best demonstrate that it can successfully implement and operate a Maglev system will receive up to $1 billion from TEA–21 for final development and construction of the initial Project.

The Magnetic Levitation Transportation Program is an important and exciting program designed to develop a new and much improved mode of ground transportation. As our nation's, but especially the Greater Atlanta Metro Area's airways and highways, become more and more congested, and our environment and quality of life continue to deteriorate, it is essential that we take advantage of every opportunity to find new and better ways to improve our mobility and enhance our environment.

Available Maglev technology is the fastest, most sophisticated ground-transportation system in the world and has been tested at operating speeds of over 240 mph. The technology selected for the Atlanta-Chattanooga Corridor is Transrapid, a system that has been in research and development in Germany since the late 1960's. Transrapid rides over a fixed guideway supported, guided and propelled by magnetic force alone with virtually no moving parts.

The Atlanta-Chattanooga Maglev project is well underway and on schedule to meet TEA–21 and Federal Railroad Requirements. It brings together two key southeastern cities and states in a collaborative effort to improve future transportation options. It provides economic development opportunities and will create approximately 6,000 new jobs. We believe the Atlanta-Chattanooga region should be the first in the nation to manufacture and deploy this exciting new technology. While the project will not solve all existing transportation and air quality problems in the region, it certainly will provide an option that helps air quality and traffic congestion in both Georgia and Tennessee. In addition, the new transportation system could reduce the investment in infrastructure necessary at the Hartsfield Atlanta International Airport (HAIA), provide a reduction in commuter flights between Atlanta and Chattanooga, and therefore, extend the life of the $5.4 billion Masterplan improvement program that HAIA is initiating.

Since the study's inception in August of 1999, much progress has been made in defining the details of the proposed Atlanta to Chattanooga Maglev service. First, ridership and fare analysis have shown that the project is indeed feasible, particularly with the level of passenger travel to and from Hartsfield Atlanta International Airport.

Second, it is clear that the portion of the corridor from Hartsfield Airport to the Town Center in north Cobb county would meet the criteria set by the Federal Railroad Administration to comply with all aspects of the Maglev legislation in TEA–21. This section was initially given greater emphasis because it would in essence become the FRA Demonstration Project.

Ultimately two distinct Maglev services will be operated. Initially a local project service will be operated between Hartsfield Airport and Town Center in Cobb County. The 30-mile plus trip will stop at Vine City (central Atlanta) and Galleria stations. Once the line is extended to the Chattanooga Airport, additional service will operate between Hartsfield and Chattanooga, stopping at all intermediate stations or with express service directly between the airports.

While the cost is still being determined, experience demonstrates that the range will likely be comparable to that of the MARTA system in Atlanta on a cost per mile

basis. However, operating cost is expected to be paid by a combination of revenue from riders and the public-private partnership. Federal and or local operating subsidies will not be requested for operations or maintenance support.

The Administration has proposed fully funding the "guaranteed" portion of the Federal Aid Highways program that includes $25 million for the Maglev deployment program for fiscal year 2001. After all the takedowns and funding obligations are eliminated that will leave about $17 million for the seven competing projects. This is insufficient to evaluate the seven projects so that an appropriate down select decision can be accomplished. In order to eliminate the risks for both the FRA and the project applicants a full Environmental Impact Statement needs to be completed for each project.

The Maglev deployment program is quickly reaching a crossroads where decisions have to be made about its long term potential and future. There is great interest among the seven sponsors to continue to move forward. While final conceptual results will not be submitted until June 30, 2000 it is clear that at a minimum Atlanta-Chattanooga and perhaps two or three others, maybe all, projects competing for federal funding will offer a successful demonstration of this exciting new technology.

It appears evident that the $950 million non-guaranteed Maglev funding authorization will not in large part be appropriated during the TEA–21 funding cycle. This is due to budget constraints on the Subcommittee's 302(b) allocation. Also, because of the late start in awarding the programs it seems unlikely that actual construction of one or more projects can begin by fiscal year 2003. With both of these factors at work, it is clear that long-term decisions about Maglev deployment will be made in the next authorization bill.

For example a full Environmental Impact Statement would permit us to fully evaluate the Vine Street station in downtown Atlanta to tie MARTA, commuter rail, bus and taxi into a major intermodal connection, where the whole will definitely be larger than any of its component parts. This station would connect Phillips Arena, the World Congress Center, the Georgia Dome and corporate headquarters of Coca Cola and CNN. The station at HAIA would become the "centerpiece" for a truly multi-modal transportation hub linking the future Southern Crescent Transportation Service Center (housing commuter and high-speed rail, local and regional bus systems, a future MARTA station and Maglev) to the new East Terminal at HAIA.

Further completing the EIS process would permit us to fully negotiate an agreement that is in process between Georgia Power and Tennessee Valley Authority to work together to supply power for the Maglev system, thus creating a new truly emission free transportation alternative. Also, there are major private Maglev partners that are "on the bubble" that would truly revolutionize the concept of airport travel (to, from and in the sky) in the Atlanta-Chattanooga Region. The commitment of funding for the EIS will signal the resolve to move forward with this new transportation technology. Importantly, all costs under the EIS process will be completely defined as has been tested under the Federal Transit Administration's Full Funding Grant Agreement Process. This is a process that has been proven with over a decade of experience.

We urge the Subcommittee to provide an additional $7 million for fiscal year 2001 for the Atlanta-Chattanooga EIS to make the best-informed decision possible and to best protect the sponsor's and Federal government's investment. These additional necessary funds can be realized from the $950 million Maglev authorization in TEA–21. The additional funds are a small amount in absolute terms, and tiny when compared to the size of the investment already made and the great potential for this new, but tested, system in the future. This is an extremely prudent hedge against making a poor decision in the future and will assure a complete picture for those who will making long-term decisions to improve mobility and the quality of life in the Atlanta-Chattanooga corridor.

We would be pleased to respond to any of the Committee's questions and urge your early recommendation of the fiscal year 2001 funding for the Atlanta-Chattanooga Environmental Impact Statement. Please contact Robert McCord at the Atlanta Regional Commission (404–463–3253) for any follow-up that may be required.

PREPARED STATEMENT OF THE SOUTHEAST HIGH SPEED RAIL CORRIDOR

The Southeast High Speed Rail Corridor is a partnership of Virginia, North Carolina, South Carolina and Georgia to provide safe and efficient intercity passenger rail service. Southeast High Speed Rail will link cities where highway and airline congestion is the greatest, providing the region with a much needed travel alternative.

Safety is our primary concern. We request a total of $5.5 million in section 1103(c) funding in the fiscal year 2001 U.S. Department of Transportation appropriation to be invested: Virginia $2 million, North Carolina $1 million, South Carolina $1 million, and Georgia $1.5 million.

We will spend the funds wisely and promptly on vital safety projects that will contribute to the mobility of people and goods in our region. We will continue to work closely with our freight rail partners to ensure the maximum return on these investments.

Each of us will also make you and the members of the subcommittee aware of other projects and programs that are vital to our individual states. We also invite your consideration of those activities.

The Southeast High Speed Rail Corridor is a unique, regional transportation asset that enhances the social and economic life of entire corridor. We value your partnership in this effort and we appreciate you ongoing support for this project.

PREPARED STATEMENT OF THE NATIONAL ASSOCIATION OF RAILROAD PASSENGERS

Thank you for the opportunity to submit this statement for the record. Our nonpartisan Association—whose members are individuals—has worked since 1967 towards development of a modern rail passenger network in the U.S.

SUMMARY

We strongly support the fully authorized level of funding for Amtrak for Fiscal 2001.

We support full funding of high-speed rail and rail corridor development programs.

Amtrak usage and revenues continue to grow after a decline in the mid-1990's.

Many opportunities lie ahead for improved passenger rail service, but they will require a partnership that includes both the public and private sector.

FISCAL 2001 AMTRAK APPROPRIATIONS

We strongly support the fully authorized level of funding for Amtrak as set forth in the Amtrak Reform and Accountability Act of 1997. This Act authorized $5.163 billion in appropriations for capital and operations, for the five fiscal years of 1998 through 2002. For the first three years (1998–2000), though $3.219 billion was authorized, the Administration proposed $1.936 billion and Congress appropriated $1.774 billion, leaving a total gap (thus far) of $1.445 billion (see Table 1, next page).

TABLE 1.—APPROPRIATIONS AUTHORIZED FOR AMTRAK, 1998–2002

[In millions of dollars]

Fiscal year	Amount authorized	Administration proposal	Amount Appropriated	Authorized amount not appropriated
1998	1,138	744	594	544
1999	1,058	621	609	449
2000	1,023	571	571	452
2001	989	989	n.a.	n.a.
2002	955	n.a.	n.a.	n.a.

Amtrak and the Administration have said that the amount that was appropriated in 1998–2000 is sufficient toward furthering Amtrak's efforts to achieve operating self-sufficiency by 2003. However, as DOT Inspector General Kenneth Mead has said, if they make it, they won't make it by much. It is also clear that, at this rate, practically nothing would remain for expansions that would let passenger rail further increase its geographical reach and become a more relevant presence in the transportation market in more places. Many states want to help with these investments, but they are frustrated by the current lack of a comprehensive federal partnership in this area. (I will return to this in Section 4.)

We appreciate and support past actions by Congress to give Amtrak the flexibility to spend part of its capital appropriation on items relating to preventive maintenance. As is true for transit, preventive maintenance expenditures can forestall the need for some capital expenditures that are more expensive. They can enhance reli-

ability and help ease operating costs. This flexibility became crucial to Amtrak in Fiscal 1999, which was the first year the Administration proposed no Amtrak operating grant. We support extending this flexibility for both equipment and maintenance-of-way at least through Fiscal 2002.

HIGH-SPEED RAIL FUNDING

We support funding at the authorized level of $35 million for high-speed rail programs. This will allow the work of the Federal Railroad Administration to continue in areas that will foster future corridor development across the U.S. These areas include continued development of a high-speed locomotive that doesn't require overhead electric power, advanced signal systems, corridor planning, and advanced grade-crossing safety technology.

AMTRAK USE IS GROWING, AND WILL GROW MORE

In fiscal year 1999, Amtrak "core" passenger revenues rose 6.0 percent, ridership rose 2.0 percent, and passenger-miles rose 0.5 percent (see Table 2, next page). This makes 1999 the third year in a row that all three of these measures improved. By "core" we mean intercity passengers; these numbers do not reflect Amtrak's contract commuter operations.

TABLE 2.—AMTRAK CORE RIDERSHIP AND REVENUES, 1996–99

	Passenger revenues ($ millions)	System ridership (millions)	System passenger-miles (millions)
Fiscal:			
1996	$850.6	19.7	5,049.6
1997	$916.3	20.2	5,166.2
1998	$946.2	21.1	5,304.2
1999	$1,003.4	21.5	5,330.1
Percent change:			
1996–99	+18.0	+9.3	+5.6
1998–99	+6.0	+2.0	+0.5

Of course, we would like to have seen stronger gains. The Northeast and West business units in fact did post stronger gains. The Intercity unit suffered partly due to serious on-time performance problems. Many of these problems were caused by the after-effects of the Union Pacific meltdown, and—later in the year—by disastrous, new problems as Norfolk Southern and CSX struggled with the complex Conrail transaction.

We expect that all three indicators in Table 2 will increase as a result of Amtrak's attaining a full level of Acela service in the Northeast Corridor. While Congress made significant infrastructure investments in the Northeast Corridor in the 1990's, the increased service levels made possible by these investments are only just beginning. The first increment of added service began January 31, with conversion of two Boston-New York-Washington round-trips to all-electric Acela Regional service, reducing the Boston South Station-New York City running time to just under four hours. The ridership response has been strongly positive. More service will be added throughout 2000 as remaining electrification work is completed, and as new locomotives and new complete train sets are delivered for Acela Regional and Acela Express services, respectively.

FUTURE OPPORTUNITIES EXIST, BUT REQUIRE A FEDERAL PARTNER

This investment in the Northeast, making possible faster, all-electric service possible for the first time beyond New Haven to Boston, is arguably the single-greatest passenger-rail-related infrastructure investment by any agency in the U.S. since the Great Depression. This project will have a direct regional impact on transportation in the Northeast, by enhancing the attractiveness of passenger trains and making them a much better alternative to constrained highway and airport capacity. Also, the entire project (infrastructure and new train sets) will demonstrate to other areas of the country that modern, high-speed rail is not just for the Europeans and Japanese.

We believe the evidence continues to show that Americans are eager to ride good train service wherever it is provided. Whatever the short term holds for oil prices, most experts—including those at the International Energy Agency—believe that the

era of cheap oil has at most 10–15 years to go. The U.S. relies on energy-intensive domestic aviation more than any other nation. Therefore, the stronger our passenger rail system can become, the more it can soften the negative impacts of future energy price increases on our economy and our quality of life.

Public support for expanded service—which would be greatly aided by appropriating the entire amount authorized for Amtrak—was reinforced on February 1 at a Capitol Hill breakfast with the formation of a bi-partisan coalition of state Departments of Transportation to press for federal funding for intercity passenger rail. The confidence this Subcommittee has shown in Amtrak is vindicated by statements like the following from Illinois DOT Secretary Kirk Brown, made on February 1: "Amtrak has done an outstanding job. Three years ago, we would have said Amtrak was a problem. But they've changed the way they do business. They have done a great job of building credibility with the local communities."

At the same meeting, North Carolina Deputy Secretary David King said, "We have been so bold as to rename the NEC [Northeast Corridor]. We call it the ACC. That's the Atlantic Coast Corridor. Two-thirds of the people who board our trains [in North Carolina] want to go to the Northeast Corridor. It's not a one-state business that we're about. It's got to be national. Like Illinois, we're pleased at the progress Amtrak has made . . . What really is missing is [meaningful] federal money." New York DOT Assistant Commissioner Jack Guinan and Wisconsin DOT Deputy Director Terry Mulcahy also praised Amtrak.

Another remarkable sign that passenger rail is popular among states came last December when 26 governors wrote to this Subcommittee and Office of Management and Budget Director Jack Lew asking that Amtrak be funded at the fully authorized level in 2001.

The U.S. lags the world in making it easy for travelers to connect between intercity passenger rail and airlines. Many people will be surprised by the positive impact on Amtrak's revenues when the station at Newark Airport opens in 2001. We are pleased that T. F. Green Airport in Providence will get an Amtrak station (also in 2001), and that planners in the Midwest are looking at air/rail connections in Gary and Milwaukee and possibly elsewhere. We remain convinced that the greatest untapped opportunity to exploit air/rail lies in extending Amtrak trains—and O'Hare's Airport Transit (people mover)—to Metra's O'Hare Transfer commuter rail station.

We strongly support adding key routes to the long-distance network. Among the most important needs we see: Midwest-Nashville-Atlanta-Florida and Seattle-Portland-Denver-Texas. Long-distance trains will benefit from high-speed corridor initiatives, with better reliability and travel times in territory shared by both types of service. This is particularly true in the Midwest, where Chicago-East Coast trains have been severely impacted by the 1999 split-up of Conrail.

PREPARED STATEMENT OF THE AMERICAN PASSENGER RAIL COALITION

Chairman Shelby and Members of the Subcommittee on Transportation Appropriations, thank you for the opportunity to present testimony to the Subcommittee on the importance of the nation's intercity passenger railroad—Amtrak—and the funding Amtrak needs to continue its success in building ridership and revenues and to partner with states on investments in high-speed rail on corridors around the country.

The American Passenger Rail Coalition (APRC) is an association of the nation's railroad equipment suppliers and rail-related businesses that are working for a financially strong, efficient and safe U.S. intercity passenger rail system. APRC member companies manufacture railroad cars and locomotives, railcar brakes, doors and lighting, rail signaling systems, rail cable and ties and provide important services such as track repair, computer and networking services, communications, food delivery and other services. APRC member companies have manufacturing plants and businesses in states across the country that employ thousands of U.S. workers and contribute to the economic health of states and communities.

MOMENTUM IS BUILDING NATIONWIDE FOR IMPROVED INTERCITY RAIL PASSENGER SERVICE

Momentum is building in states and regions around the country—in the Midwest, the Northeast, the Southeast, the South, the West and the Pacific Northwest—for improved intercity passenger rail service. States and communities are not only speaking out about the need for improved rail service but are investing substantial amounts of their own money to bring this about. An indication of this momentum was the announcement in October 1999 by the states of Wisconsin, Illinois and

Michigan that they will, in partnership with Amtrak, develop a plan to purchase new rail equipment capable of travelling 110 mph to operate on three Midwest passenger rail corridors. What is becoming apparent is that states from all regions of the country share a conviction that intercity passenger rail must be an essential element of state and national plans to assure future mobility, economic development and a high quality of life.

STRONG FEDERAL LEADERSHIP IS ESSENTIAL

Federal leadership through strong funding of Amtrak and a partnership with the states is essential to ensuring the success of the investments states and communities are making to improve rail service. Partnership between the federal government and states has been basis for construction and expansion of our nation's highways, airports and other modes of transportation. This federal-state partnership enables key capital and infrastructure investments to be made that result in better service, greater capacity and ridership growth. With a federal-state partnership, intercity passenger rail and high-speed rail service will develop and attract a growing ridership.

APRC thanks the Subcommittee for the support it has shown for Amtrak. APRC expresses special appreciation to Senator Frank Lautenberg for his steadfast commitment and untiring efforts to secure the funding Amtrak needs to continue to improve and grow. In fiscal year 2001, APRC asks the Subcommittee to appropriate $989 million for Amtrak, the full-authorized level Congress approved for Amtrak for fiscal year 2001 in the Amtrak reauthorization legislation. This funding will keep Amtrak on track to operational self-sufficiency by fiscal year 2003 and enable Amtrak to partner with states in making capital investments in the high-speed rail corridors.

More than half of the nation's Governors are on record supporting $989 million for Amtrak in fiscal year 2001. State legislators, mayors and community leaders, rail business and rail passenger associations, labor and other organizations all have expressed support for funding Amtrak at the full-authorized level in fiscal year 2001. This is a critical time for federal leadership in intercity passenger rail. The return to the nation for its investments in Amtrak and high-speed rail will be high.

AMTRAK'S STRATEGIC BUSINESS PLAN IS YIELDING POSITIVE RESULTS

Under the leadership of the Amtrak Board of Directors and President and CEO, George Warrington, and guided by the Strategic Business Plan they have adopted, Amtrak is increasing its revenues and ridership and entering into partnerships that are yielding increased efficiency and growth. Indications of the positive results in the last fiscal year (fiscal year 1999) include:

—Amtrak total revenues were $1.84 billion, the highest in Amtrak's history.
—Amtrak exceeded the bottom-line target in its business plan by $8 million.
—Ridership was 21.5 million, up 2 percent from fiscal year 1998 and nearly 10 percent over fiscal year 1997.
—Passenger-related revenues set a record again, topping $1 billion.
—Amtrak increased the number of trains operating in many states and reintroduced passenger rail service to Oklahoma for the first time in 20 years.
—Amtrak's mail and express freight service produced $98 million in revenue, up 18 percent over the prior fiscal year.

In December 1999, Moody's Investment Services, after reviewing Amtrak's finances and Strategic Business Plan, raised Amtrak's credit rating to A3, a rating that means "a stable outlook" and noted that it "reflects Moody's assessment of the financial strength of Amtrak in relation to its unique operations and prominence in the U.S."

Each year, since 1994, Amtrak has presented to Congress a timeline of its "glidepath" to becoming free of federal operating assistance. The glidepath does not include nor has it ever included progressive overhauls or depreciation, a non-cash expense, as federal operating costs. Amtrak is on track to becoming free of federal operating assistance as understood historically by both Amtrak and Congress. Amtrak is fully intent on meeting the financial goals and reforms established by Congress in the Amtrak Reform and Accountability Act of 1997.

AMTRAK'S PUBLIC AND PRIVATE PARTNERSHIPS YIELD NEW REVENUES AND RIDERSHIP

The public and private partnerships, which Amtrak is undertaking, are generating new revenues and opportunities to increase service. Amtrak's mail and express business, which is central to improving the economics of the long-distance trains, has been experiencing double digit growth. On the Chicago-San Antonio

Texas Eagle, which was nearly cancelled three years ago, service has increased and ridership was up 17 percent in the first quarter of this fiscal year (Oct-Dec. 1999).

Amtrak ridership increased last year, reaching record levels on some routes:

—New York-Washington D.C. Metroliner Service set its third consecutive ridership record in fiscal year 1999, with 2.24 million passengers.

—The Philadelphia-Harrisburg Keystone Service, provided in partnership with Pennsylvania, rose 18 percent to nearly 1 million passengers.

—Amtrak's partnership with Washington State and Oregon and the popular European-style Talgo trains operating along the Pacific Northwest Corridor boosted rail ridership to 450,000 in fiscal year 1999. Amtrak ridership in the corridor has quadrupled over the past six years.

On January 31, Amtrak celebrated the inauguration of all-electric rail service between Boston and New York City. The new Acela Regional service will reduce New York to Boston rail travel time by as much as 90 minutes. Completion of the final 156-mile section of the Northeast Corridor electrification system from New Haven to Boston made this all-electric service possible. With this final link, the entire Northeast Corridor from Boston to Washington D.C. now has overhead electrification. New, comfortable upgraded railcars and faster downtown-to-downtown service will draw new business and other customers to the rails. Later this year, Amtrak and the nation will celebrate the launch of the Acela Express high-speed rail service in the Northeast Corridor. The sleek new trainsets, manufactured by the consortium of Bombardier and ALSTOM Transportation, will travel at top speeds of 150 miles per hour, cutting the Boston-New York travel time to under 3 hours, and will provide U.S. rail passengers with a new level of speed, comfort and service quality. The Acela high-speed rail service, the linchpin of Amtrak's strategy to achieve operational self-sufficiency, is projected to attract an additional 2.6 million riders annually to Amtrak and generate net revenues of at least $180 million. Design and construction of the new trains generated contracts with businesses in 23 states, created thousands of jobs and will yield substantial economic benefits for the Northeast region and the nation.

STATE COMMITMENTS TO HIGH-SPEED RAIL CORRIDOR DEVELOPMENT

States and regions are making substantial investments to improve intercity passenger rail service. Some examples include:

—State transportation officials announced on February 1, the formation of a new "States for Passenger Rail" coalition through which states will work together for strong funding for intercity passenger rail service and funding to advance the designated high-speed rail corridors. Nineteen states have already joined to coalition. Others are expected to join in the weeks ahead.

—Nine Midwestern states, in cooperation with Amtrak and the Federal Railroad Administration (FRA), are developing the Midwest Regional Rail Initiative, a plan to improve intercity passenger rail service on 3,000 miles of track throughout the region.

—A $185 million agreement was signed between New York State and Amtrak to upgrade seven Turboliner trains that operate on NY's Empire Corridor and for other infrastructure investments on the corridor.

—In November 1999, Amtrak and Pennsylvania DOT announced a $140 million agreement to fund improvements on the Philadelphia-Harrisburg Keystone Corridor, including electrification of the route, purchase of equipment, upgraded track and other improvements.

—In California, Amtrak made its largest state investment ever—$125 million for new trains for the popular San Diego-San Luis Obispo rail corridor.

—In the Pacific Northwest, investments by Washington and Oregon to improve intercity passenger rail service are yielding big gains (cited earlier).

—Along the Gulf Coast, Mississippi, Louisiana, Alabama are working on plans to improve rail service along the Gulf Coast high-speed rail corridor.

FUNDING FOR FRA'S NEXT GENERATION HIGH SPEED RAIL PROGRAM AND FOR RAIL SAFETY

APRC also asks the Subcommittee to provide strong funding for the Federal Railroad Administration's Next Generation High-Speed Rail Program, to continue the important contributions this program is making in the development of a high-speed non-electric locomotive, advances in positive train control, development and testing of advanced grade crossing protection technologies and in other areas. Highway-railroad grade crossing elimination programs are crucial to the development of high-speed rail and APRC asks the Subcommittee to continue funding for these important programs.

IMPORTANT LEGISLATIVE OPPORTUNITIES TO IMPROVE INTERCITY PASSENGER RAIL

Finally, APRC would like to express its support for two important pieces of legislation that will provide states with increased opportunities to invest in passenger rail improvements. S. 1900, the High Speed Rail Investment Act, introduced by Senator Lautenberg and co-sponsors would authorize Amtrak to sell $10 billion in bonds over 10 years and invest the money in designated high-speed rail corridors. A federal investment of $400 million would leverage billions in capital for high-speed rail investment. The Senate bill has 40 co-sponsors. A House companion bill has been introduced. S. 1144, the Surface Transportation Act, led by Senator Voinovich, would allow states to use flexible federal surface transportation funds (STP, CMAQ and NHS) for intercity passenger rail, where the state believes rail is the best transportation solution. This legislation is supported by many public and private organizations. Enactment of these bills, along with strong federal appropriations for Amtrak and to advance high-speed rail R&D and rail safety, will enable Amtrak and the states to make crucial passenger rail investments that will yield high returns for the nation.

APRC thanks the Subcommittee for the opportunity to present this testimony.

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